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The Wilkinson Microwave Anisotropy Probe (WMAP¹) Source Catalog

E. L. Wright², X. Chen², N. Odegard³, C. L. Bennett⁴, R. S. Hill³, G. Hinshaw⁵, N. Jarosik⁶, E. Komatsu⁷, M. R. Nolte⁸, L. Page⁶, D. N. Spergel^{9,10}, J. L. Weiland³, E. Wollack⁵, J. Dunkley^{6,9,11}, B. Gold⁴, M. Halpern¹², A. Kogut⁵, D. Larson⁴, M. Limon¹³, S. S. Meyer¹⁴, G. S. Tucker¹⁵

wright@astro.ucla.edu

ABSTRACT

We present the list of point sources found in the *WMAP* 5-year maps. The technique used in the first-year and three-year analysis now finds 390 point

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²UCLA Physics & Astronomy, PO Box 951547, Los Angeles, CA 90095-1547

³Adnet Systems, Inc., 7515 Mission Dr., Suite A100 Lanham, Maryland 20706

⁴Dept. of Physics & Astronomy, The Johns Hopkins University, 3400 N. Charles St., Baltimore, MD 21218-2686

⁵Code 665, NASA/Goddard Space Flight Center, Greenbelt, MD 20771

⁶Dept. of Physics, Jadwin Hall, Princeton University, Princeton, NJ 08544-0708

⁷Univ. of Texas, Austin, Dept. of Astronomy, 2511 Speedway, RLM 15.306, Austin, TX 78712

⁸Canadian Institute for Theoretical Astrophysics, 60 St. George St, University of Toronto, Toronto, ON Canada M5S 3H8

⁹Dept. of Astrophysical Sciences, Peyton Hall, Princeton University, Princeton, NJ 08544-1001

¹⁰Princeton Center for Theoretical Physics, Princeton University, Princeton, NJ 08544

¹¹Astrophysics, University of Oxford, Keble Road, Oxford, OX1 3RH, UK

¹²Dept. of Physics and Astronomy, University of British Columbia, Vancouver, BC Canada V6T 1Z1

¹³Columbia Astrophysics Laboratory, 550 W. 120th St., Mail Code 5247, New York, NY 10027-6902

¹⁴Depts. of Astrophysics and Physics, KICP and EFI, University of Chicago, Chicago, IL 60637

¹⁵Dept. of Physics, Brown University, 182 Hope St., Providence, RI 02912-1843

sources, and the five-year source catalog is complete for regions of the sky away from the galactic plane to a 2 Jy limit, with $\text{SNR} > 4.7$ in all bands in the least covered parts of the sky. The noise at high frequencies is still mainly radiometer noise, but at low frequencies the CMB anisotropy is the largest uncertainty. A separate search of CMB-free V-W maps finds 99 sources of which all but one can be identified with known radio sources. The sources seen by *WMAP* are not strongly polarized. Many of the *WMAP* sources show significant variability from year to year, with more than a 2:1 range between the minimum and maximum fluxes.

Subject headings: radio sources, variable sources, cosmic microwave background, cosmology: observations, space vehicles, space vehicles: instruments, instrumentation: detectors, telescopes

1. INTRODUCTION

The Wilkinson Microwave Anisotropy Probe (*WMAP*) (Bennett et al. 2003a) is a Medium-class Explorer (MIDEX) mission designed to study cosmology by producing full-sky maps of the cosmic microwave background (CMB) anisotropy. *WMAP* has measured the angular power spectrum of the CMB anisotropy over 10^3 different values of the spherical harmonic index l . All of these data can be adequately fit by a simple 6 parameter Λ CDM model, and this model can also fit other datasets (Spergel et al. 2007). A determination of the interference from foreground sources is an essential part of the analysis of CMB data (Nolta et al. 2008). The most important foreground at small angular scales is due to extragalactic flat-spectrum radio sources. Sources are found by searching the maps for bright spots that approximate the beam profile, but due to the limited angular resolution of *WMAP* it is possible to confuse positive CMB excursions with point sources. Nonetheless, *WMAP* provides the only all-sky survey of the millimeter-wave sky so its point source catalogs are valuable for the study of flat-spectrum radio sources. In addition, the *WMAP* point source catalog is used to mask out contaminated spots in the high galactic latitude sky used for cosmological analyses. 208 point sources were found in a search of the first year of *WMAP* observations (Bennett et al. 2003b). A search for point sources in the three-year *WMAP* data found 323 sources (Hinshaw et al. 2007). In this paper we report on 390 point sources found in the *WMAP* five-year maps.

The signal to noise ratio on point sources found in *WMAP* depends on the the sensitivity in Janskies per pixel and the number of pixels that can be averaged to estimate the flux. Since *WMAP* was designed to give approximately equal sensitivity in each band, and the

conversion factor from Janskies to Rayleigh-Jeans brightness temperature in Kelvins within a constant pixel size is determined by the illuminated area of the telescope, the sensitivity in Janskies per pixel is fairly constant. The Γ_{ff} factors tabulated by Hill et al. (2008) give the peak temperature expected for a 1 Jansky source as 262.7, 211.9, 219.6, 210.1 & 179.2 μ K for the K through W bands of *WMAP*. But the number of pixels that can be averaged to estimate the flux is proportional to the wavelength squared, so the overall radiometer noise contribution to the point source flux uncertainty is approximately proportional to the frequency. *WMAP* actually illuminates different fractions of the primary mirror in different bands, and does not have exactly the same sensitivity in Kelvins per pixel in each band, so the actual radiometer noise contributions to point source flux estimates are 0.067, 0.11, 0.13, 0.23 & 0.40 Jy divided by the square root of the number of years of observations for sources on the ecliptic where the coverage is smallest. The anisotropy of the CMB itself is also a source of noise that does not integrate down with more years of observation. Using the point-source flux estimating filters on simulated noise-free CMB maps generated using the parameters in Spergel et al. (2007) gives 1σ flux noises of 0.27, 0.41, 0.36, 0.27 & 0.14 Jy in the K, Ka, Q, V & W bands (Chen & Wright 2008). This “CMB noise” term peaks where the beam size matches the first acoustic peak.

2. POINT SOURCES IN INDIVIDUAL BAND MAPS

Extragalactic point sources contaminate the *WMAP* anisotropy data and a few hundred of them are strong enough that they should be masked and discarded prior to undertaking any CMB analysis. In this section we describe a new direct search for sources in the five-year *WMAP* band maps. Based on this search, we update the source mask that was used in the five-year analysis.

In the three-year analysis, we produced a catalog of bright point sources in the *WMAP* sky maps, independent of their presence in external surveys. This process has been repeated with the five-year maps as follows. We filter the weighted maps, $N_{\text{obs}}^{1/2}T$ (N_{obs} is the number of observations per pixel) in harmonic space by $b_l/(b_l^2 C_l^{\text{cmb}} + C_l^{\text{noise}})$, (Tegmark & de Oliveira-Costa 1998; Refregier et al. 2000), where b_l is the transfer function of the *WMAP* beam response (Page et al. 2003; Jarosik et al. 2007; Hill et al. 2008), C_l^{cmb} is the CMB angular power spectrum, and C_l^{noise} is the noise power. Note that the CMB angular power spectrum used in this filtering has been updated to match the parameters from the *WMAP* three-year analysis, and that the importance of the noise power spectrum goes down as one over the number of years of data. Peaks that are $>5\sigma$ in the filtered map in any band are fit in the unfiltered maps for all bands to a Gaussian profile plus a planar baseline. The Gaussian amplitude

is converted to a source flux density using the conversion factors given in Hill et al. (2008). When a source is identified with $>5\sigma$ confidence in any band, the flux densities for other bands are given if they are $>2\sigma$ and the fit source width is within a factor of 2 of the true beam width. We cross-correlate detected sources with the GB6 (Gregory et al. 1996), PMN (Griffith et al. 1994), and Kühr et al. (1981) catalogs to identify 5 GHz counterparts. If a 5 GHz source is within $11'$ of the *WMAP* source position (the *WMAP* source position uncertainty is $4'$) we identify the *WMAP* source with the 5 GHz source and list the identification in Table 1. When more than one source lies within the cutoff radius the brightest one is assumed to be the *WMAP* counterpart.

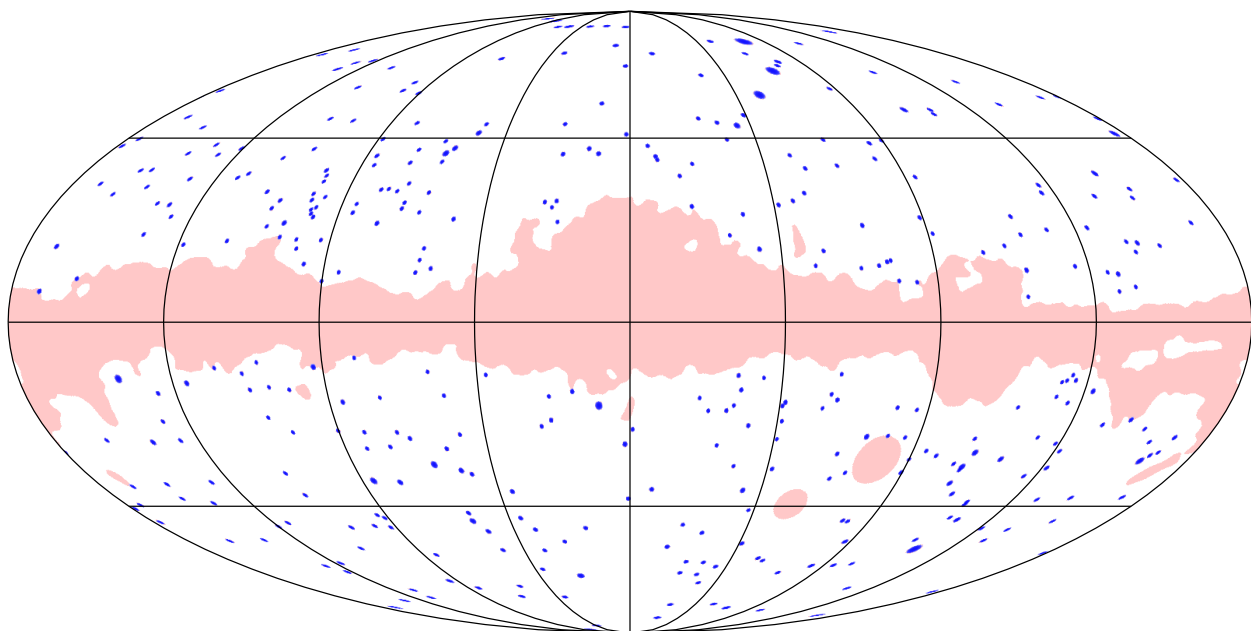


Fig. 1.— Map showing the location of the 390 point sources found by searching individual band maps. The shaded region shows the mask used to exclude extended foreground emission. The size of the plotted points indicates the flux of the source: the area of the dot scales like the maximum flux over the 5 *WMAP* bands plus 4 Jy. Galactic coordinates are plotted.

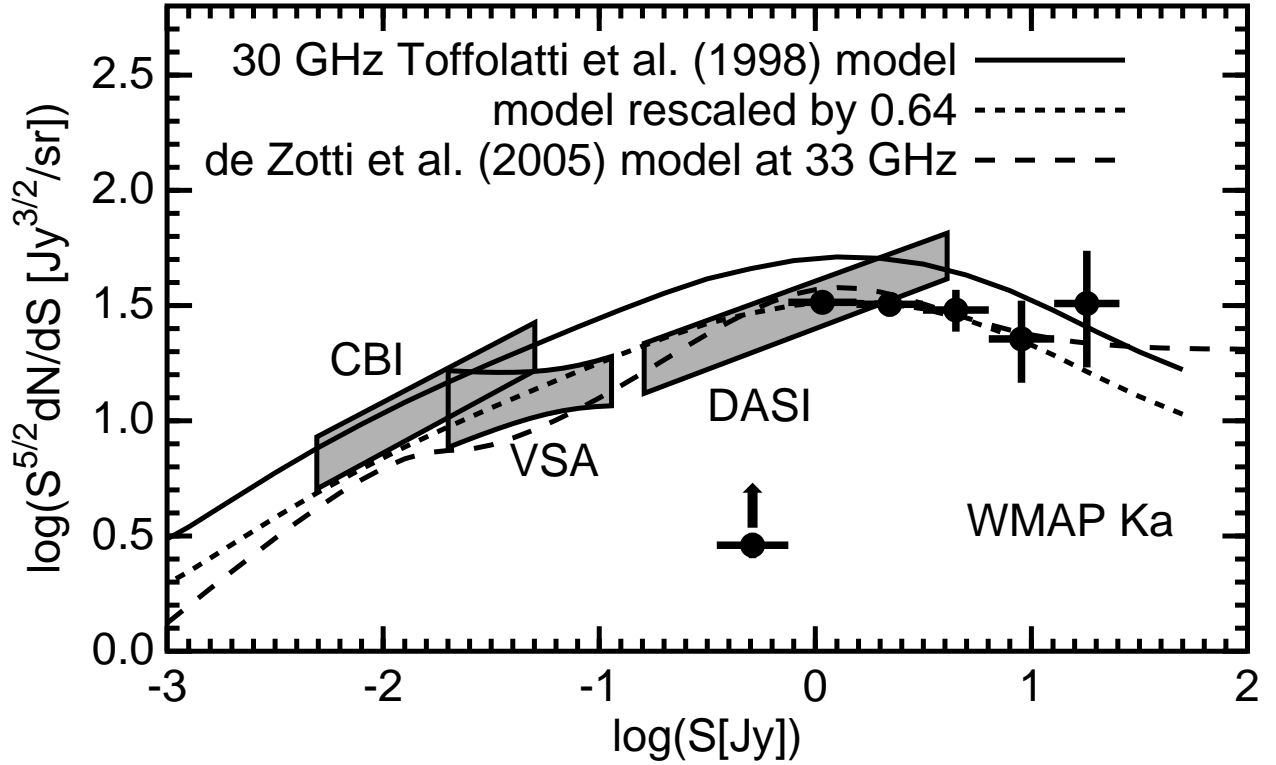


Fig. 2.— Differential source counts from the WMAP five-year catalog compared the Toffolatti et al. (1998) model, and to CBI counts at 31 GHz (Mason et al. 2003), 33 GHz VSA counts (Cleary et al. 2005), and DASI 31 GHz counts (Kovac et al. 2002). Models from Toffolatti et al. (1998) and de Zotti et al. (2005) are shown as well. Error bars for WMAP are statistical only. The WMAP catalog in the 0.35 to 0.75 Jy bin is quite incomplete, leading to the low data point with the upward arrow on the plot.

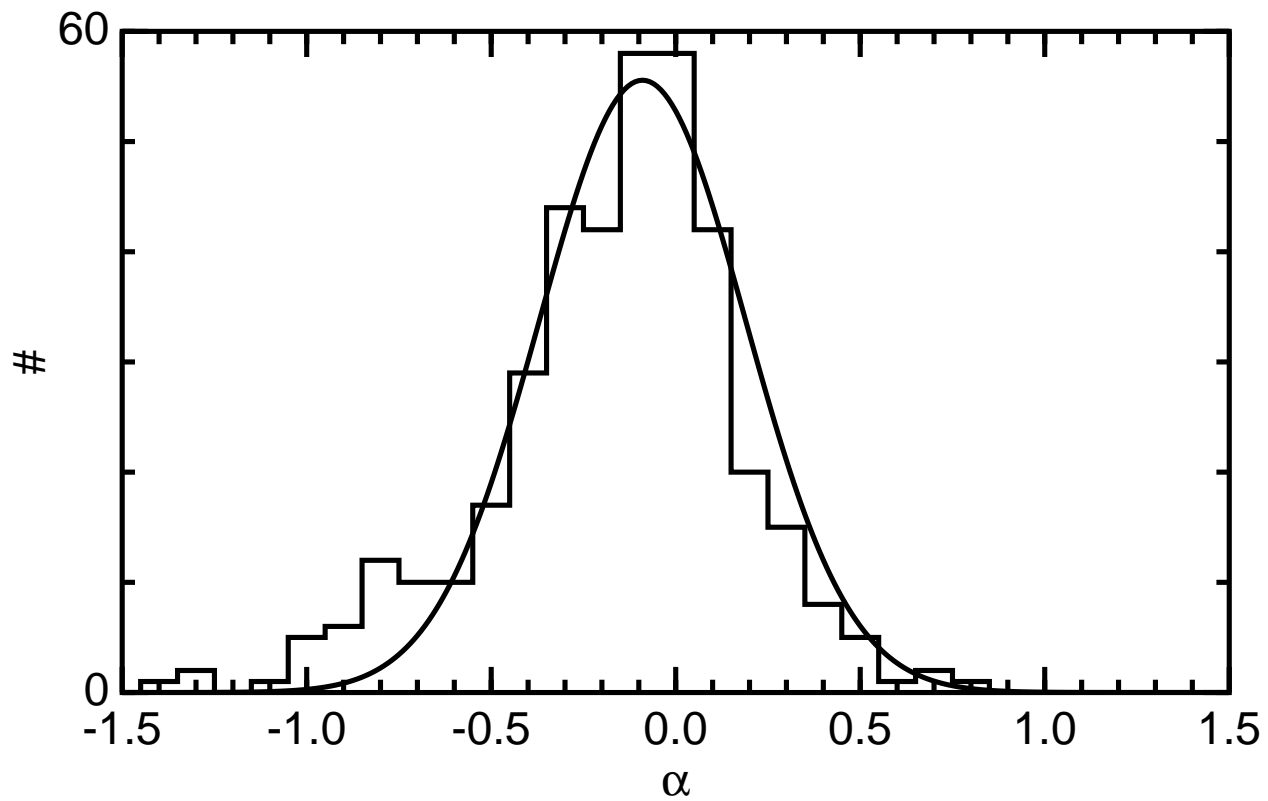


Fig. 3.— A histogram of the spectral indices of *WMAP* sources in the five-year maps. The smooth curve is a Gaussian with a mean of -0.09 and a standard deviation of 0.28 , normalized to the total number of sources.

The catalog of 390 sources obtained from the five-year maps is listed in Table 1. In the first-year catalog, source ID numbers were assigned on the basis of position (sorted by galactic longitude). Now, rather than assigning new numbers to the newly detected sources, we follow Hinshaw et al. (2007) and recommend that WMAP sources be referred to by their coordinates, e.g., WMAP J0006-0622. For reference, we give the first-year source ID in column 3 of Table 1. The 5 GHz IDs are given in the last column.

The three-year catalog contained 323 sources. Given the increased sensitivity in the five-year maps, the number of new sources detected is consistent with expectations based on differential source count models. At the same time, three sources from the first-year catalog are not present in the five-year list (numbers 15, 61 & 156). Source numbers 31, 96 and 168 which were missing in the three-year list have been resurrected. Simulations of the first-year catalog suggested that it contained 5 ± 4 false detections, so the number of dropped first-year sources is consistent with expectations. Nine sources from the three-year catalog are missing from the five-year catalog: WMAP J0513-2015, 0734+5021, 1227+1124, 1231+1351, 1302+4856, 1309+1155, 1440+4958, 1556-7912 & 1648+4114. The sources J1227+1124 and J1231+1351 were spurious detections caused by sidelobes in the filtered maps around the strong source J1230+1223. The problem of strong source sidelobes is handled as follows in the 5-year analysis: after identification of each source with signal-to-noise ratio greater than 30 in a filtered map, the map is cleaned by subtracting the point spread function scaled to the source peak. A total of 6 out of the 323 sources in the three-year catalog could not be identified with 5 GHz counterparts; now 17 out of the 390 sources in the five-year catalog do not have 5 GHz identifications. The strong source J1924-2914 is included in the five-year catalog but not in the previous catalogs because of a small change in the mask used to exclude Galactic plane and Magellanic cloud regions. Isolated mask regions with fewer than 500 contiguous HEALPix res 9 pixels are no longer included in the mask (compare Figure 1 with the Kp0 mask in Figure 2 of Bennett et al. (2003b)). The point source catalog mask shown in Figure 1 is available on the LAMBDA web site, <http://lambda.gsfc.nasa.gov>.

Trushkin (2003) has compiled multifrequency radio spectra and high resolution radio maps of the sources in the first-year WMAP catalog. Reliable identifications are claimed for 205 of the 208 first-year sources. Of the 203 sources with optical identifications, Trushkin (2003) finds 141 quasars, 42 galaxies, or active galactic nuclei, 19 BL Lac-type objects and one planetary nebula, IC418. Forty percent of the sources are identified as having flat and inverted radio spectra, 13% might have GHz-peaked spectra, 8% are classical power-law sources, and 7% have a classical low frequency power-law combined with a flat or inverted spectrum component (like 3C84). Trushkin (2003) suggests that WMAP source number 116 is likely to be spurious and, for source 61 no radio component was found. Indeed, source 61 is not present in either the three-year catalog or the five-year catalog. Giommi et al. (2007)

observed the 23 objects in the first WMAP sample that were not reported as X-ray sources and detected all of these objects in the 0.3 -10 keV band. They report a strong correlation between X-ray and microwave properties for these blazars.

The distribution of five-year sources on the sky is shown in Figure 1. A Kp0+LMC+SMC mask was used when finding point sources. This mask excluded 22% of the sky. The source counts in the 33 GHz band are shown in Figure 2. The scaling of the Toffolatti et al. (1998) model has decreased from 0.66 to 0.64. The slope of the WMAP source counts is quite close to the Euclidean $dN/dS \propto S^{-2.5}$ slope, while both the models (Toffolatti et al. 1998; de Zotti et al. 2005) and the more sensitive data (Mason et al. 2003; Cleary et al. 2005) show sub-Euclidean faint source counts.

The spectral indices of the sources are clustered near a flat spectrum, $\alpha = 0$ in $F_\nu \propto \nu^\alpha$. A histogram of the measured α 's is shown in Figure 3. The smooth curve is a Gaussian with a mean of $\langle\alpha\rangle = -0.09$ and $\sigma = 0.28$. This σ includes measurement errors and is thus an upper limit on the true dispersion of spectral indices. Assuming for simplicity that the underlying distributions of spectral indices is a Gaussian with standard deviation σ_o , then the intrinsic dispersion that gives χ^2 per degree of freedom equal to unity is $\sigma_o = 0.176$ and the weighted mean $\langle\alpha\rangle = -0.09$.

2.1. Analysis of Simulated Maps

The point source analysis was repeated on simulated maps constructed with point sources, CMB fluctuations, and radiometer noise. 10^6 sources were sampled from a power law $N(> S)$ distribution at 30 GHz. This distribution was matched to the de Zotti et al. (2005) source count model. Spectral indices were then chosen from a Gaussian with mean -0.09 and standard deviation 0.176, and the fluxes were scaled to the 5 WMAP band centers. For each source, the appropriate temperature in each band was then added to a randomly chosen HEALpix pixel at resolution 11 (a total of 12×4^{11} pixels). These point source maps, one for each band, were then smoothed with the beam window function and converted to a resolution 9 map, and added to a simulated CMB plus radiometer noise maps. The point source detection process was then applied to these simulated maps, yielding 363 point sources. Of these, only 6 were spurious. The recovered $N(> S)$ agreed with the simulation input for fluxes > 1 Jy, but fell well below the input at lower fluxes. Since sources with fluxes < 1 Jy are unlikely to be detected, the ones that are detected tend to have “benefited” from a positive noise or CMB fluctuation, leading to a bias at low fluxes (Eddington 1913). The mean ratio of the derived flux to the input flux in bands K-V is within 5% of unity for fluxes > 1 Jy, but then increases by 10-20% or more for fluxes < 1 Jy. In the W band the measured

flux is about 10% below the input flux for fluxes > 2 Jy, and rises to $> 20\%$ above the input flux for fluxes < 1 Jy. The bias in the W band flux for high fluxes could be due to the Gaussian approximation used in flux fitting. The deviation of the mean measured spectral index from the input spectral index is about -0.02 for Q band fluxes > 2 Jy, but rises to +0.04 Jy at 1 Jy and is higher than +0.10 for fluxes less than 1 Jy. We conclude that the fluxes and spectral indices are reliable for fluxes > 2 Jy, but small biases are present for fluxes $\lesssim 1$ Jy. The source counts should be reliable for fluxes $\gtrsim 1$ Jy.

3. POINT SOURCES IN CMB-FREE ILC MAPS

The number of sources detected by *WMAP* as a function of integration times varied as $N \propto t_{int}^{0.4}$ between the one-year and the three-year catalogs, but slowed slightly to $\propto t_{int}^{0.37}$ between the three-year and the five-year maps. This could be due to the “noise” from the CMB, which does not integrate down with increased observing time. An approach to circumvent this noise term has been developed by Chen & Wright (2008). It involves forming internal linear combination (ILC) maps from the *WMAP* bands, but unlike the normal ILC maps which preserve the CMB and suppress foregrounds, these ILC maps are designed to suppress the CMB. Applying this technique to the *WMAP* V and W bands alone, Chen & Wright (2008) found 31 sources in the one-year maps and 64 sources in the three-year maps. This gives $N \propto t_{int}^{0.66}$ indicating that the ILC technique improves rapidly with increased observing time.

We have applied this ILC V-W technique to the five-year maps and there are 99 sources detected in the region with $|b| > 10^\circ$. These are listed in Table 2. Among them, 64 are in the *WMAP* 5 year source catalog, 17 can be identified with sources in NED based on continuity of spectral energy distributions, 17 are in complex galactic emission regions, leaving only one source at $09^h21^m28^s$, $+7^\circ24'22''$ without any identification. The V-W technique can find sources sitting in negative peaks of the CMB where the standard flux finding technique returns an insignificant or even negative flux. V band fluxes for these sources have been estimated by multiplying the value of the V-W map in mK, tabulated in Table 2, by the median conversion factor derived from the sources identified in Table 1. This factor is 6.28 Jy per mK. Of the 99 sources in Table 2, 12 are in the source list by Nie & Zhang (2007) using the cross-correlation detection method, 8 are in the new detections of the non-blind catalog by López-Caniego et al. (2007), 27 are in the AT20G Bright Source Sample (Massardi et al. 2008), and 70 are in the CRATES catalog Healey et al. (2007).

The number of sources found by the ILC V-W technique continues to increase fairly quickly with increased integration time, going like $t^{0.72}$ from 1 year to 5 years. For Euclidean

source counts the expected scaling is $t^{0.75}$.

4. FLUX VARIABILITY OVER FIVE YEARS

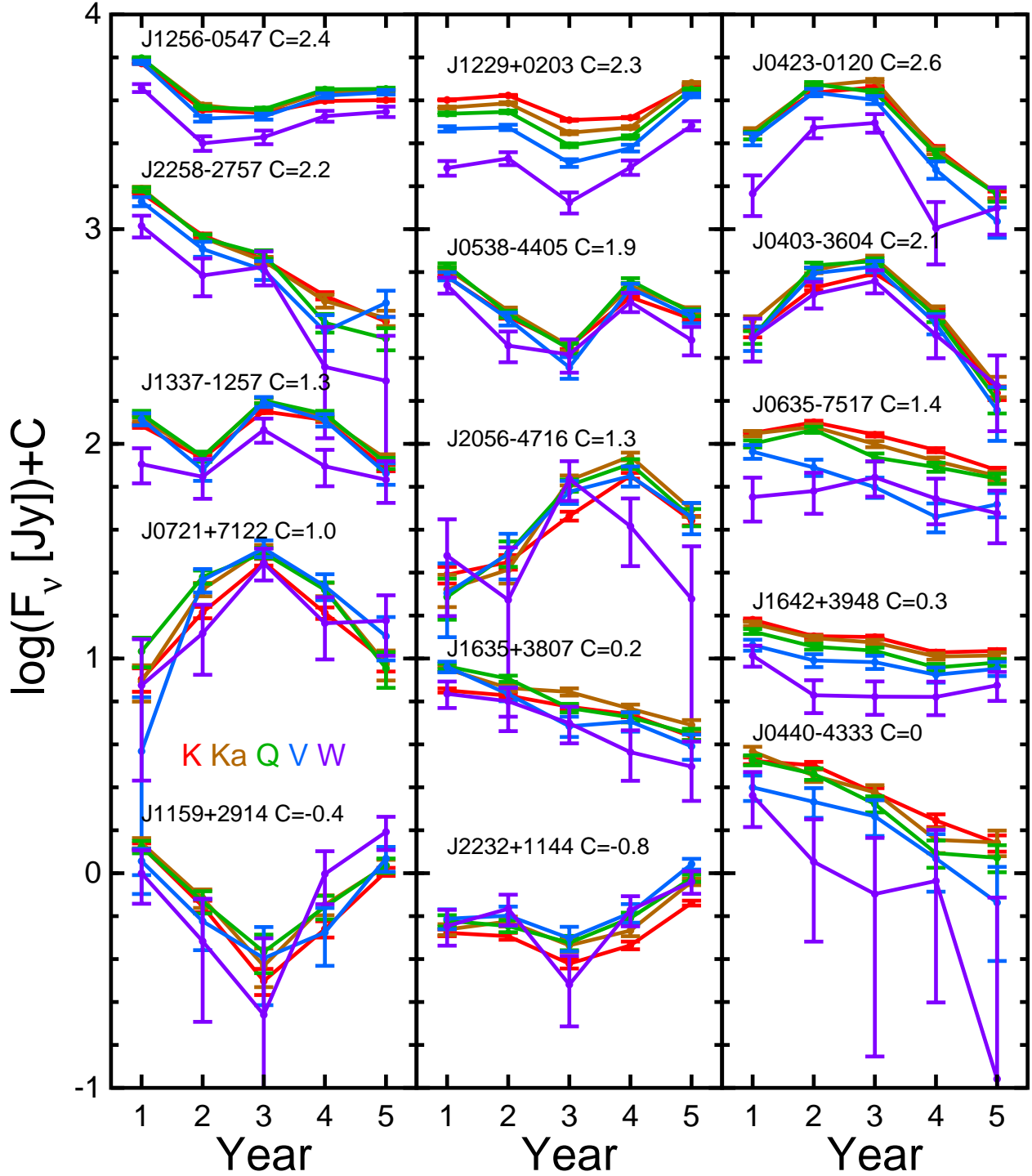


Fig. 4.— The 15 sources with the highest χ^2 for a fit of a constant flux with an arbitrary spectrum. The 23 GHz data are plotted in red, the 33 GHz data are plotted in orange, the 41 GHz data are plotted in green, the 61 GHz data are plotted in blue, and the 94 GHz data are plotted in purple.

An analysis of the variability of the *WMAP* point sources has been performed by forming fluxes from the individual year maps. It is possible to measure the variability of a source without any noise contribution from the CMB by subtracting the five-year average map from each individual year. The fit of a Gaussian beam plus planar baseline to this difference map then gives a ΔF_i for the i^{th} year, and the flux for the i^{th} year is then given by $F_i = \langle F \rangle + \Delta F_i$ where the five-year average flux is $\langle F \rangle$.

There are 25 data points for a source detected in all five bands, and fitting an arbitrary spectrum that is constant in time leaves 20 degrees of freedom. 137 of the 390 sources in Table 1 give $\chi^2 > 37.6$ relative to this fit and thus are variable at greater than 99% confidence. Sources with $\chi^2 > 37.6$ are flagged with a “v” in the notes column of Table 1. The 54 sources with $\chi^2 > 100$ have a “V” in the notes column. These are generally the brighter sources which have smaller relative flux errors, allowing a better detection of variability. The 5 band lightcurves for the 15 sources with $\chi^2 > 450$ are plotted in Figure 4. The median rms variability of the Q band fluxes among the 25 brightest Q band sources is 23%, after allowing for the flux variations due to radiometer noise.

It is clear from Figure 4 that most of the variability involves the entire spectrum of a source moving up and down together, at least on the one year time resolution of this analysis. The full table of year-by-year and band-by-band fluxes for *WMAP* sources will be available on LAMBDA.

5. POLARIZATION

In general the *WMAP* detected point sources are not strongly polarized. Of the 390 sources in Table 3, only 5 have polarizations greater than 4σ in two or more bands. These sources are listed in Table 3. In order to assess the average polarization of the sources, the square of the polarized flux, evaluated as $Q^2 + U^2 - \sigma_Q^2 - \sigma_U^2$, was fit to the form $p^2 I^2$. This gave mean polarization percentages of $p = 2.9, 2.2, 1.9, < 3.4$ & $< 8.5\%$ in K, Ka, Q, V & W. For the V & W bands 2σ upper limits on the mean polarization percentage are given.

6. EFFECT ON THE POWER SPECTRUM

Uncorrelated point sources contribute a power spectrum $C_l = \text{const}$ to the power spectrum. Since one has to divide by the beam function b_l^2 and multiply by $l(l+1)/2\pi$ to put this on the usual angular power spectrum plot, point sources give a large contribution to the power spectrum at high l . This can be estimated and removed from the cosmological signal

in several different ways. The first technique puts an adjustable constant term in the model C_l , while a second technique fits the difference between frequency bands to a constant C_l . The CMB gives the same angular power spectrum in different bands, but the contribution of radio point sources is strongly frequency dependent:

$$C_l^{\text{i,src}} = A g_i g_{i'} \left(\frac{\nu_i}{\nu_Q} \right)^\beta \left(\frac{\nu_{i'}}{\nu_Q} \right)^\beta w_l^{\text{i}}, \quad (1)$$

where $C_l^{\text{i,src}}$ is the point source contribution to the observed cross-power spectrum between bands i and i' , the factors g_i convert the result to thermodynamic temperature, $\nu_Q \equiv 40.7$ GHz, and we assume a power law frequency spectrum with index $\beta = \langle \alpha \rangle - 2$. The window function $w_l^{\text{i}} = b_i^{\text{i}} b_{i'}^{\text{i}} p_l^2$ as in Hinshaw et al. (2007). A third technique computes the effect of unresolved point sources using a model for the counts of sources too faint to be in the catalog. This gives

$$C_l = \left(\frac{\partial B_\nu}{\partial T} \right)^{-2} \int_0^{S_{\text{lim}}} S^2 \left(\frac{dN}{dS} \right) dS \quad (2)$$

for uncorrelated sources, where $\partial B_\nu / \partial T$ converts temperature into intensity, or equivalently the integral of $T d\Omega$ in the definition of a_{lm} into flux. Thus the point source contribution to an observed cross-power spectrum can be written

$$C_l^{\text{i,src}} = \left(\frac{c^4}{4k^2(\nu_i \nu_{i'})^2} \right) g_i g_{i'} w_l^{\text{i}} \int S_i S_{i'} dN \quad (3)$$

where the integral is over all unmasked sources.

If the wrong spectral index is used to convert the difference between power spectra at different frequencies into a point source contribution, then there will be a systematic error in the cosmological parameters, primarily in the spectral index n_s . This effect can be estimated using a simple model for the correction to the 61 GHz C_l derived from the difference between the 41 and 94 GHz spectra:

$$\Delta C_l^V = \nu_V^\beta \frac{C_l^Q - C_l^W}{\nu_Q^\beta - \nu_W^\beta} \approx C_l^V (\beta = -2) (1 + 0.59(\beta + 2) + \dots) \quad (4)$$

Thus if β were really -2.09 instead of -2 then the correction to the 61 GHz power spectrum should be 5% smaller than that which would be estimated assuming $\beta = -2$. Hufenberger et al. (2006) found that decreasing the point source correction by 44% changed the spectral index n_s by 0.018 so changing β from -2.0 to -2.09 would change n_s by 0.0022, or 0.15σ .

7. SUMMARY AND CONCLUSIONS

There are no other radio surveys that provide the wide coverage of *WMAP* at frequencies from 23-100 GHz. In addition, *WMAP* provides year by year fluxes to track the variability of bright millimeter-wave sources. We present catalogs of point sources found in the *WMAP* 5 year dataset. Two different approaches have been used: the standard approach of looking for peaks in single band maps that have been convolved with a matched filter, and a new approach that constructs CMB-free internal linear combination maps. Using the 61 and 94 GHz data gives a catalog with somewhat lower sensitivity than the standard approach, but with better positional accuracy. The estimated contamination of the CMB angular power spectrum by unmasked point sources has been estimated, with results that are consistent with previous analyses and with the differences between angular power spectra in different bands (Nolta et al. 2008). Remaining uncertainties in the point source correction contribute to the uncertainty of the cosmological parameters, with the biggest effect occurring for n_s .

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Table 1. WMAP Source Catalog

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|---------------|---------------|-----------------|-----------------|-------|
| 00 03 20 | −47 52 | | ... | 0.7 ± 0.06 | 0.7 ± 0.09 | 0.4 ± 0.1 | ... | -0.7 ± 1 | ... | |
| 00 06 06 | −06 23 | 060 | 2.3 ± 0.06 | 2.3 ± 0.1 | 2.3 ± 0.1 | 2.0 ± 0.2 | ... | -0.1 ± 0.2 | PMN J0006-0623 | v |
| 00 10 37 | 11 01 | | 1.1 ± 0.07 | 1.2 ± 0.1 | 1.2 ± 0.1 | 1.0 ± 0.2 | 1.6 ± 0.5 | 0.1 ± 0.3 | GB6 J0010+1058 | V |
| 00 12 53 | −39 52 | 202 | 1.3 ± 0.04 | 1.3 ± 0.08 | 1.0 ± 0.09 | 1.3 ± 0.2 | 0.8 ± 0.2 | -0.2 ± 0.2 | PMN J0013-3954 | |
| 00 19 18 | 26 03 | | 1.0 ± 0.06 | 0.7 ± 0.1 | 0.8 ± 0.1 | 0.5 ± 0.2 | 1.4 ± 0.3 | 0.0 ± 0.3 | GB6 J0019+2602 | |
| 00 19 40 | 20 20 | | 1.0 ± 0.06 | 1.1 ± 0.08 | 0.9 ± 0.09 | 1.3 ± 0.2 | ... | 0.1 ± 0.3 | GB6 J0019+2021 | |
| 00 25 22 | −26 02 | | 0.9 ± 0.05 | 0.7 ± 0.09 | 0.5 ± 0.08 | ... | ... | -0.8 ± 0.6 | PMN J0025-2602 | a |
| 00 26 07 | −35 10 | | 1.1 ± 0.07 | 1.1 ± 0.09 | 1.4 ± 0.1 | 1.0 ± 0.2 | ... | 0.2 ± 0.3 | PMN J0026-3512 | v |
| 00 29 34 | 05 54 | | 1.1 ± 0.06 | 1.3 ± 0.09 | 1.0 ± 0.09 | 0.7 ± 0.2 | ... | -0.1 ± 0.3 | GB6 J0029+0554B | a |
| 00 38 14 | −24 59 | | 0.7 ± 0.06 | 0.8 ± 0.1 | 0.6 ± 0.1 | 1.1 ± 0.3 | ... | 0.3 ± 0.5 | PMN J0038-2459 | |
| 00 43 12 | 52 08 | | 1.0 ± 0.04 | 0.6 ± 0.07 | 0.5 ± 0.08 | 0.5 ± 0.1 | ... | -1.0 ± 0.4 | GB6 J0043+5203 | |
| 00 47 19 | −25 14 | 062 | 1.1 ± 0.06 | 0.9 ± 0.1 | 1.1 ± 0.1 | 1.0 ± 0.2 | 0.9 ± 0.2 | -0.1 ± 0.3 | PMN J0047-2517 | |
| 00 49 50 | −57 39 | 179 | 1.4 ± 0.05 | 1.4 ± 0.07 | 1.2 ± 0.07 | 1.2 ± 0.2 | 0.8 ± 0.3 | -0.2 ± 0.2 | PMN J0050-5738 | v |
| 00 50 48 | −42 24 | | 1.3 ± 0.03 | 1.3 ± 0.06 | 1.2 ± 0.06 | 0.7 ± 0.1 | 0.8 ± 0.2 | -0.2 ± 0.2 | PMN J0051-4226 | v |
| 00 50 49 | −06 49 | | 1.1 ± 0.06 | 1.1 ± 0.09 | 0.7 ± 0.1 | 1.3 ± 0.2 | 1.2 ± 0.5 | -0.0 ± 0.3 | PMN J0051-0650 | |
| 00 51 02 | −09 27 | 077 | 1.0 ± 0.06 | 1.0 ± 0.08 | 0.8 ± 0.09 | 1.1 ± 0.2 | ... | -0.1 ± 0.3 | PMN J0050-0928 | |
| 01 00 08 | −56 54 | | 0.5 ± 0.04 | 0.7 ± 0.08 | 0.8 ± 0.08 | 0.5 ± 0.1 | ... | 0.3 ± 0.4 | ... | |
| 01 06 43 | −40 35 | 171 | 2.2 ± 0.04 | 2.4 ± 0.07 | 2.2 ± 0.09 | 2.0 ± 0.2 | 1.5 ± 0.3 | -0.0 ± 0.1 | PMN J0106-4034 | V |
| 01 08 30 | 13 19 | 079 | 1.4 ± 0.06 | 1.1 ± 0.1 | 0.8 ± 0.2 | ... | ... | -0.8 ± 0.6 | GB6 J0108+1319 | |
| 01 08 43 | 01 35 | 081 | 1.9 ± 0.06 | 1.9 ± 0.08 | 1.7 ± 0.1 | 1.5 ± 0.2 | ... | -0.1 ± 0.2 | GB6 J0108+0135 | a,V |
| 01 15 21 | −01 29 | | 0.9 ± 0.05 | 1.2 ± 0.08 | 1.0 ± 0.09 | 1.1 ± 0.1 | ... | 0.2 ± 0.3 | PMN J0115-0127 | |
| 01 16 18 | −11 37 | | 1.3 ± 0.07 | 1.0 ± 0.1 | 1.0 ± 0.1 | 1.5 ± 0.3 | ... | -0.1 ± 0.4 | PMN J0116-1136 | |
| 01 21 46 | 11 50 | | 1.2 ± 0.05 | 1.1 ± 0.1 | 1.2 ± 0.1 | 0.6 ± 0.2 | ... | -0.3 ± 0.4 | GB6 J0121+1149 | |
| 01 25 21 | −00 10 | 086 | 1.1 ± 0.06 | 1.2 ± 0.09 | 1.1 ± 0.1 | 0.8 ± 0.2 | ... | -0.0 ± 0.3 | PMN J0125-0005 | a |
| 01 32 36 | −16 53 | 097 | 1.8 ± 0.05 | 1.8 ± 0.09 | 1.8 ± 0.1 | 1.6 ± 0.2 | 1.3 ± 0.3 | -0.1 ± 0.2 | PMN J0132-1654 | |
| 01 33 08 | −52 00 | 168 | 0.8 ± 0.05 | 1.1 ± 0.08 | 0.7 ± 0.07 | ... | ... | 0.0 ± 0.4 | PMN J0133-5159 | |
| 01 33 26 | −36 27 | | 0.6 ± 0.06 | 0.6 ± 0.1 | ... | ... | ... | -0.3 ± 1 | PMN J0134-3629 | a |
| 01 37 01 | 47 53 | 080 | 3.8 ± 0.05 | 3.8 ± 0.09 | 3.6 ± 0.1 | 3.2 ± 0.2 | 1.8 ± 0.2 | -0.2 ± 0.09 | GB6 J0136+4751 | V |
| 01 37 37 | −24 28 | | 1.3 ± 0.06 | 1.3 ± 0.09 | 1.8 ± 0.1 | 1.4 ± 0.2 | ... | 0.4 ± 0.3 | PMN J0137-2430 | V |
| 01 49 10 | 05 53 | | 1.0 ± 0.06 | 0.7 ± 0.09 | 0.8 ± 0.1 | ... | ... | -0.4 ± 0.5 | GB6 J0149+0555 | |
| 01 52 28 | 22 08 | | 1.2 ± 0.09 | 1.3 ± 0.2 | 1.3 ± 0.1 | 1.4 ± 0.2 | 1.7 ± 0.5 | 0.2 ± 0.3 | GB6 J0152+2206 | |
| 02 04 49 | 15 13 | 092 | 1.3 ± 0.06 | 1.3 ± 0.1 | 1.1 ± 0.1 | 1.6 ± 0.3 | ... | 0.0 ± 0.3 | GB6 J0204+1514 | v |
| 02 05 01 | 32 13 | 085 | 1.6 ± 0.07 | 1.5 ± 0.1 | 1.2 ± 0.1 | 0.7 ± 0.2 | ... | -0.5 ± 0.3 | GB6 J0205+3212 | |
| 02 05 03 | −17 04 | | 0.7 ± 0.1 | ... | 0.9 ± 0.2 | 0.8 ± 0.1 | 0.6 ± 0.3 | 0.0 ± 0.5 | PMN J0204-1701 | |
| 02 10 51 | −51 00 | 158 | 2.7 ± 0.05 | 2.7 ± 0.08 | 2.8 ± 0.09 | 2.7 ± 0.2 | 2.1 ± 0.4 | 0.0 ± 0.1 | PMN J0210-5101 | |
| 02 18 27 | 01 38 | 096 | 1.3 ± 0.05 | 1.2 ± 0.08 | 0.8 ± 0.1 | ... | 0.7 ± 0.3 | -0.5 ± 0.3 | ... | v |
| 02 20 57 | 35 58 | | 1.2 ± 0.06 | 1.2 ± 0.09 | 0.9 ± 0.1 | 1.1 ± 0.2 | 1.3 ± 0.3 | -0.1 ± 0.2 | GB6 J0221+3556 | |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|-----------------|----------------|----------------|---------------|---------------|-----------------|----------------|-------|
| 02 22 45 | −34 40 | 137 | 1.0 ± 0.03 | 1.0 ± 0.05 | ... | 0.7 ± 0.1 | ... | -0.2 ± 0.3 | PMN J0222-3441 | |
| 02 23 10 | 43 03 | 084 | 1.8 ± 0.06 | 1.4 ± 0.1 | 1.4 ± 0.1 | 1.3 ± 0.3 | 1.2 ± 0.2 | -0.4 ± 0.2 | GB6 J0223+4259 | a |
| 02 31 37 | 13 20 | | 1.3 ± 0.07 | 1.2 ± 0.08 | 1.2 ± 0.1 | 0.9 ± 0.2 | ... | -0.2 ± 0.3 | GB6 J0231+1323 | |
| 02 31 39 | −47 42 | | 0.7 ± 0.05 | 0.9 ± 0.09 | 0.9 ± 0.07 | 1.2 ± 0.1 | 0.7 ± 0.2 | 0.3 ± 0.2 | PMN J0231-4746 | |
| 02 37 58 | 28 48 | 093 | 3.8 ± 0.06 | 3.4 ± 0.1 | 3.5 ± 0.1 | 3.2 ± 0.3 | 2.1 ± 0.4 | -0.2 ± 0.1 | GB6 J0237+2848 | V |
| 02 38 48 | 16 37 | | 1.5 ± 0.08 | 1.6 ± 0.1 | 1.6 ± 0.1 | 1.6 ± 0.3 | ... | 0.1 ± 0.3 | GB6 J0238+1637 | v |
| 02 41 18 | −08 21 | | 1.0 ± 0.06 | 0.7 ± 0.09 | 0.7 ± 0.1 | ... | ... | -0.8 ± 0.5 | PMN J0241-0815 | v |
| 02 45 18 | −44 56 | | 0.5 ± 0.05 | 0.7 ± 0.1 | 0.6 ± 0.09 | 0.7 ± 0.2 | ... | 0.5 ± 0.5 | PMN J0245-4459 | |
| 02 53 33 | −54 42 | 155 | 2.4 ± 0.04 | 2.7 ± 0.07 | 2.5 ± 0.08 | 2.2 ± 0.1 | 1.8 ± 0.3 | 0.0 ± 0.1 | PMN J0253-5441 | V |
| 02 59 31 | −00 15 | | 1.1 ± 0.06 | 1.4 ± 0.08 | 1.2 ± 0.08 | 0.8 ± 0.1 | ... | 0.0 ± 0.3 | PMN J0259-0020 | |
| 03 03 33 | −62 12 | 162 | 1.4 ± 0.06 | 1.3 ± 0.1 | 1.4 ± 0.08 | 1.3 ± 0.1 | 1.0 ± 0.2 | -0.1 ± 0.2 | PMN J0303-6211 | |
| 03 08 26 | 04 05 | 102 | 1.3 ± 0.07 | 1.3 ± 0.1 | 1.2 ± 0.1 | 0.9 ± 0.3 | ... | -0.1 ± 0.4 | GB6 J0308+0406 | |
| 03 09 16 | 10 28 | | 1.1 ± 0.07 | 1.3 ± 0.1 | 1.3 ± 0.1 | 1.5 ± 0.2 | 1.5 ± 0.5 | 0.3 ± 0.3 | GB6 J0309+1029 | |
| 03 09 50 | −61 02 | 160 | 1.1 ± 0.05 | 1.2 ± 0.08 | 0.9 ± 0.07 | 0.9 ± 0.2 | 0.7 ± 0.3 | -0.2 ± 0.3 | PMN J0309-6058 | |
| 03 12 21 | −76 45 | 174 | 1.0 ± 0.05 | 1.2 ± 0.08 | 1.1 ± 0.07 | 0.9 ± 0.1 | 0.8 ± 0.3 | -0.0 ± 0.2 | PMN J0311-7651 | |
| 03 12 50 | 01 31 | | 0.9 ± 0.06 | 0.8 ± 0.2 | 0.9 ± 0.1 | 0.8 ± 0.2 | ... | 0.0 ± 0.4 | GB6 J0312+0132 | |
| 03 19 45 | 41 31 | 094 | 11.3 ± 0.06 | 8.9 ± 0.09 | 7.5 ± 0.1 | 5.6 ± 0.2 | 3.9 ± 0.4 | -0.7 ± 0.04 | GB6 J0319+4130 | v |
| 03 22 25 | −37 11 | 138 | 18.5 ± 3.1 | 12.6 ± 2.0 | 10.6 ± 1.9 | 8.4 ± 2.5 | ... | -0.8 ± 0.2 | 1Jy 0320-37 | b |
| 03 25 14 | 22 25 | | 0.8 ± 0.08 | 0.9 ± 0.1 | 1.1 ± 0.2 | 0.5 ± 0.2 | ... | 0.1 ± 0.5 | GB6 J0325+2223 | |
| 03 29 45 | −23 54 | 123 | 1.2 ± 0.05 | 1.3 ± 0.07 | 1.2 ± 0.1 | 1.0 ± 0.1 | 0.9 ± 0.2 | -0.0 ± 0.2 | PMN J0329-2357 | |
| 03 34 20 | −40 07 | 146 | 1.4 ± 0.05 | 1.5 ± 0.07 | 1.4 ± 0.07 | 1.4 ± 0.1 | 1.5 ± 0.4 | 0.0 ± 0.2 | PMN J0334-4008 | V |
| 03 36 49 | −12 57 | | 1.0 ± 0.05 | 0.9 ± 0.07 | 1.1 ± 0.1 | 0.9 ± 0.1 | 0.7 ± 0.3 | -0.1 ± 0.3 | PMN J0336-1302 | |
| 03 39 24 | −01 43 | 106 | 2.4 ± 0.07 | 2.3 ± 0.1 | 2.2 ± 0.1 | 1.7 ± 0.2 | 2.1 ± 0.3 | -0.2 ± 0.1 | PMN J0339-0146 | v |
| 03 40 29 | −21 19 | | 1.1 ± 0.05 | 1.1 ± 0.07 | 1.1 ± 0.09 | 1.2 ± 0.1 | 1.2 ± 0.2 | 0.1 ± 0.2 | PMN J0340-2119 | |
| 03 48 51 | −27 47 | 129 | 1.2 ± 0.03 | 1.0 ± 0.06 | 0.9 ± 0.07 | 1.5 ± 0.2 | ... | -0.2 ± 0.2 | PMN J0348-2749 | |
| 03 58 47 | 10 29 | | 1.2 ± 0.1 | 1.1 ± 0.2 | ... | ... | ... | -0.1 ± 1 | GB6 J0358+1026 | |
| 04 03 57 | −36 04 | 136 | 3.4 ± 0.05 | 3.8 ± 0.08 | 3.6 ± 0.08 | 3.4 ± 0.1 | 3.0 ± 0.3 | 0.0 ± 0.07 | PMN J0403-3605 | V |
| 04 05 36 | −13 04 | 114 | 2.0 ± 0.06 | 1.8 ± 0.09 | 1.7 ± 0.1 | 1.5 ± 0.2 | ... | -0.3 ± 0.2 | PMN J0405-1308 | v |
| 04 07 02 | −38 25 | 141 | 1.1 ± 0.06 | 1.0 ± 0.1 | 0.9 ± 0.08 | 0.8 ± 0.1 | ... | -0.4 ± 0.3 | PMN J0406-3826 | |
| 04 08 50 | −75 06 | | 0.8 ± 0.04 | 0.5 ± 0.06 | 0.3 ± 0.08 | ... | ... | -1.4 ± 0.6 | PMN J0408-7507 | |
| 04 11 23 | 76 54 | 082 | 1.0 ± 0.05 | 0.7 ± 0.1 | 0.7 ± 0.1 | 0.8 ± 0.2 | 0.8 ± 0.2 | -0.3 ± 0.3 | 1Jy 0403+76 | |
| 04 16 32 | −20 51 | | 1.1 ± 0.05 | 1.1 ± 0.08 | 1.0 ± 0.08 | 0.8 ± 0.2 | ... | -0.1 ± 0.3 | PMN J0416-2056 | |
| 04 23 16 | −01 20 | 110 | 8.2 ± 0.06 | 8.3 ± 0.1 | 7.9 ± 0.1 | 7.1 ± 0.2 | 4.9 ± 0.4 | -0.1 ± 0.05 | PMN J0423-0120 | V |
| 04 23 50 | 02 18 | | 1.2 ± 0.05 | 1.0 ± 0.08 | 0.7 ± 0.09 | ... | ... | -0.8 ± 0.4 | GB6 J0424+0226 | |
| 04 24 53 | 00 35 | 109 | 1.5 ± 0.08 | 1.6 ± 0.1 | 1.8 ± 0.1 | 1.3 ± 0.2 | ... | 0.2 ± 0.3 | GB6 J0424+0036 | v |
| 04 24 56 | −37 57 | 140 | 1.5 ± 0.05 | 1.2 ± 0.1 | 1.2 ± 0.1 | 1.5 ± 0.2 | ... | -0.1 ± 0.2 | PMN J0424-3756 | V |
| 04 28 27 | −37 57 | | 1.5 ± 0.05 | 1.4 ± 0.08 | 1.3 ± 0.07 | 1.3 ± 0.2 | 1.2 ± 0.4 | -0.2 ± 0.2 | PMN J0428-3756 | a |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|----------------|---------------|-----------------|----------------|-------|
| 04 33 13 | 05 21 | 108 | 2.4 ± 0.06 | 2.4 ± 0.1 | 2.3 ± 0.1 | 2.5 ± 0.3 | 2.4 ± 0.4 | -0.0 ± 0.2 | GB6 J0433+0521 | v |
| 04 40 16 | -43 32 | 147 | 2.5 ± 0.06 | 2.3 ± 0.09 | 2.2 ± 0.08 | 1.7 ± 0.2 | 0.9 ± 0.2 | -0.3 ± 0.1 | PMN J0440-4332 | v |
| 04 42 45 | -00 17 | | 0.9 ± 0.06 | 0.8 ± 0.1 | 1.2 ± 0.2 | 0.8 ± 0.2 | 0.8 ± 0.3 | 0.0 ± 0.4 | PMN J0442-0017 | |
| 04 49 18 | -81 00 | 175 | 1.7 ± 0.05 | 1.8 ± 0.08 | 1.6 ± 0.09 | 1.6 ± 0.1 | 1.4 ± 0.2 | -0.0 ± 0.1 | PMN J0450-8100 | v |
| 04 53 19 | -28 06 | 131 | 1.5 ± 0.06 | 1.5 ± 0.09 | 1.4 ± 0.08 | 1.2 ± 0.2 | 1.5 ± 0.4 | -0.1 ± 0.2 | PMN J0453-2807 | |
| 04 55 55 | -46 17 | 151 | 3.9 ± 0.05 | 4.0 ± 0.09 | 4.0 ± 0.09 | 3.5 ± 0.2 | 2.7 ± 0.4 | -0.0 ± 0.08 | PMN J0455-4616 | V |
| 04 56 59 | -23 22 | 128 | 2.4 ± 0.04 | 2.5 ± 0.07 | 2.4 ± 0.1 | 1.9 ± 0.2 | 1.9 ± 0.5 | -0.1 ± 0.1 | PMN J0457-2324 | V |
| 05 01 18 | -01 59 | | 1.1 ± 0.07 | 1.2 ± 0.1 | 1.1 ± 0.1 | 1.0 ± 0.3 | ... | -0.0 ± 0.4 | PMN J0501-0159 | |
| 05 06 55 | -61 08 | 154 | 2.1 ± 0.04 | 1.8 ± 0.06 | 1.6 ± 0.07 | 1.1 ± 0.1 | 0.8 ± 0.2 | -0.5 ± 0.1 | PMN J0506-6109 | a,v |
| 05 13 56 | -21 55 | 127 | 1.1 ± 0.04 | 1.1 ± 0.06 | 0.9 ± 0.09 | ... | 1.0 ± 0.3 | -0.1 ± 0.3 | PMN J0513-2159 | v |
| 05 15 20 | -45 58 | | ... | ... | 0.9 ± 0.1 | 1.1 ± 0.2 | ... | 0.4 ± 1 | PMN J0515-4556 | a |
| 05 19 21 | -05 39 | 116 | 2.4 ± 0.06 | 1.8 ± 0.07 | 1.2 ± 0.09 | 0.8 ± 0.1 | ... | -1.0 ± 0.2 | PMN J0520-0537 | c |
| 05 19 42 | -45 46 | 150 | 6.8 ± 0.05 | 5.3 ± 0.08 | 4.4 ± 0.1 | 3.3 ± 0.2 | 2.2 ± 0.3 | -0.7 ± 0.06 | PMN J0519-4546 | a |
| 05 23 02 | -36 27 | 139 | 4.2 ± 0.05 | 3.9 ± 0.08 | 3.8 ± 0.1 | 3.5 ± 0.2 | 2.6 ± 0.2 | -0.2 ± 0.07 | PMN J0522-3628 | V |
| 05 25 05 | -23 37 | | 0.7 ± 0.04 | 0.9 ± 0.06 | 0.7 ± 0.07 | 0.8 ± 0.2 | ... | 0.1 ± 0.3 | PMN J0525-2338 | a |
| 05 25 31 | -48 26 | | 0.9 ± 0.04 | 1.3 ± 0.07 | 1.3 ± 0.09 | 1.1 ± 0.1 | 0.8 ± 0.2 | 0.3 ± 0.2 | PMN J0526-4830 | a,v |
| 05 27 34 | -12 41 | 122 | 1.4 ± 0.05 | 1.6 ± 0.09 | 1.4 ± 0.1 | 1.2 ± 0.1 | 1.1 ± 0.3 | -0.1 ± 0.2 | PMN J0527-1241 | |
| 05 34 23 | -61 07 | | 0.5 ± 0.03 | 0.5 ± 0.05 | 0.6 ± 0.05 | 0.6 ± 0.09 | ... | 0.0 ± 0.3 | PMN J0534-6106 | |
| 05 38 52 | -44 05 | 148 | 5.6 ± 0.05 | 5.9 ± 0.08 | 6.0 ± 0.09 | 5.4 ± 0.2 | 4.6 ± 0.3 | 0.0 ± 0.05 | PMN J0538-4405 | V |
| 05 39 48 | -28 44 | | 0.6 ± 0.09 | 0.6 ± 0.08 | 0.6 ± 0.1 | 0.7 ± 0.1 | ... | 0.2 ± 0.5 | PMN J0539-2839 | v |
| 05 40 44 | -54 15 | 152 | 1.4 ± 0.05 | 1.4 ± 0.07 | 1.4 ± 0.09 | 1.1 ± 0.1 | ... | -0.1 ± 0.2 | PMN J0540-5418 | v |
| 05 42 28 | 49 51 | 095 | 1.7 ± 0.07 | 1.3 ± 0.1 | 1.3 ± 0.1 | 0.8 ± 0.1 | ... | -0.7 ± 0.3 | GB6 J0542+4951 | |
| 05 50 39 | -57 31 | 153 | 1.2 ± 0.04 | 1.0 ± 0.05 | 1.0 ± 0.08 | 0.9 ± 0.1 | ... | -0.3 ± 0.2 | PMN J0550-5732 | |
| 05 55 59 | 39 42 | 100 | 3.0 ± 0.06 | 2.4 ± 0.09 | 1.7 ± 0.1 | ... | ... | -0.8 ± 0.2 | GB6 J0555+3948 | |
| 05 59 53 | -45 28 | | 0.7 ± 0.05 | 1.0 ± 0.07 | 0.9 ± 0.06 | 0.7 ± 0.1 | ... | 0.4 ± 0.4 | PMN J0559-4529 | |
| 06 07 00 | 67 23 | 091 | 1.2 ± 0.04 | 0.9 ± 0.05 | 0.7 ± 0.08 | 0.6 ± 0.2 | ... | -0.7 ± 0.3 | GB6 J0607+6720 | a |
| 06 08 47 | -22 20 | | 1.1 ± 0.04 | 1.1 ± 0.06 | 0.9 ± 0.08 | 0.6 ± 0.1 | 0.5 ± 0.2 | -0.3 ± 0.3 | PMN J0608-2220 | |
| 06 09 37 | -15 41 | 126 | 3.7 ± 0.05 | 3.3 ± 0.09 | 3.1 ± 0.1 | 2.2 ± 0.2 | 1.9 ± 0.5 | -0.3 ± 0.1 | PMN J0609-1542 | V |
| 06 21 02 | -25 16 | | 0.6 ± 0.06 | 0.5 ± 0.1 | 0.3 ± 0.1 | ... | ... | -1.0 ± 1 | PMN J0620-2515 | |
| 06 23 03 | -64 36 | | 0.9 ± 0.03 | 0.8 ± 0.05 | 0.8 ± 0.04 | 0.9 ± 0.06 | 0.9 ± 0.1 | -0.1 ± 0.1 | PMN J0623-6436 | V |
| 06 26 34 | -35 23 | | 0.7 ± 0.06 | 0.5 ± 0.1 | ... | ... | ... | -0.9 ± 2 | PMN J0627-3529 | |
| 06 29 28 | -19 58 | 130 | 1.5 ± 0.04 | 1.4 ± 0.07 | 1.4 ± 0.1 | 1.2 ± 0.2 | 1.1 ± 0.3 | -0.2 ± 0.2 | PMN J0629-1959 | v |
| 06 32 21 | -69 28 | | 0.4 ± 0.03 | 0.5 ± 0.04 | 0.4 ± 0.04 | 0.7 ± 0.1 | 0.6 ± 0.2 | 0.5 ± 0.3 | ... | |
| 06 33 51 | -22 18 | 135 | 0.5 ± 0.06 | 0.6 ± 0.07 | 0.7 ± 0.1 | 0.8 ± 0.2 | 0.9 ± 0.2 | 0.5 ± 0.4 | PMN J0633-2223 | v |
| 06 34 38 | -23 37 | | 0.6 ± 0.05 | 0.7 ± 0.08 | 0.6 ± 0.08 | 0.6 ± 0.2 | ... | 0.1 ± 0.5 | PMN J0634-2335 | |
| 06 35 51 | -75 17 | 167 | 4.3 ± 0.04 | 3.9 ± 0.06 | 3.6 ± 0.07 | 2.6 ± 0.1 | 2.5 ± 0.4 | -0.3 ± 0.06 | PMN J0635-7516 | V |
| 06 36 31 | -20 31 | 134 | 1.1 ± 0.04 | 1.1 ± 0.06 | 1.0 ± 0.08 | 0.7 ± 0.1 | ... | -0.3 ± 0.3 | PMN J0636-2041 | a |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|----------------|---------------|----------------|----------------|-------|
| 06 39 39 | 73 27 | 087 | 0.8 ± 0.05 | 0.4 ± 0.1 | 0.8 ± 0.1 | 0.8 ± 0.1 | 1.0 ± 0.2 | 0.1 ± 0.3 | GB6 J0639+7324 | |
| 06 46 30 | 44 49 | 099 | 2.9 ± 0.06 | 2.4 ± 0.1 | 2.1 ± 0.1 | 1.6 ± 0.2 | 1.3 ± 0.3 | -0.5 ± 0.2 | GB6 J0646+4451 | v |
| 07 20 05 | -62 22 | | 0.6 ± 0.04 | 0.7 ± 0.06 | 0.8 ± 0.05 | 0.5 ± 0.09 | 0.7 ± 0.3 | 0.2 ± 0.3 | PMN J0719-6218 | |
| 07 20 36 | 04 03 | | 0.9 ± 0.05 | 0.7 ± 0.08 | 0.6 ± 0.1 | ... | ... | -0.6 ± 0.5 | GB6 J0720+0404 | |
| 07 21 54 | 71 22 | | 1.6 ± 0.04 | 1.8 ± 0.07 | 1.9 ± 0.08 | 1.8 ± 0.2 | 1.5 ± 0.2 | 0.2 ± 0.1 | GB6 J0721+7120 | V |
| 07 25 52 | -00 50 | | 0.9 ± 0.1 | 1.2 ± 0.1 | 1.1 ± 0.1 | 1.0 ± 0.3 | 1.1 ± 0.2 | 0.1 ± 0.4 | PMN J0725-0054 | |
| 07 27 09 | 67 49 | | 0.6 ± 0.05 | 0.5 ± 0.08 | 0.6 ± 0.1 | 0.8 ± 0.3 | ... | -0.0 ± 0.5 | GB6 J0728+6748 | |
| 07 38 13 | 17 43 | 113 | 1.3 ± 0.06 | 1.3 ± 0.1 | 1.0 ± 0.1 | 1.3 ± 0.3 | ... | -0.2 ± 0.3 | GB6 J0738+1742 | v |
| 07 39 15 | 01 36 | 124 | 1.7 ± 0.06 | 1.9 ± 0.1 | 2.1 ± 0.1 | 2.3 ± 0.2 | 2.8 ± 1 | 0.3 ± 0.2 | GB6 J0739+0136 | V |
| 07 41 18 | 31 11 | 107 | 1.2 ± 0.06 | 1.1 ± 0.1 | 0.8 ± 0.1 | 1.0 ± 0.3 | ... | -0.3 ± 0.4 | GB6 J0741+3112 | |
| 07 43 49 | -67 27 | 161 | 1.2 ± 0.04 | 0.9 ± 0.07 | 0.7 ± 0.08 | 0.7 ± 0.2 | 1.0 ± 0.2 | -0.5 ± 0.2 | PMN J0743-6726 | |
| 07 45 24 | 10 16 | 118 | 1.1 ± 0.06 | 0.8 ± 0.1 | 0.7 ± 0.1 | 1.0 ± 0.4 | ... | -0.5 ± 0.5 | GB6 J0745+1011 | |
| 07 46 04 | -00 45 | | 1.1 ± 0.07 | 1.0 ± 0.1 | 0.8 ± 0.1 | 0.7 ± 0.1 | ... | -0.5 ± 0.4 | PMN J0745-0044 | |
| 07 50 52 | 12 30 | 117 | 2.7 ± 0.06 | 2.6 ± 0.1 | 2.6 ± 0.1 | 2.1 ± 0.2 | 1.8 ± 0.3 | -0.2 ± 0.1 | GB6 J0750+1231 | v |
| 07 53 32 | 53 54 | | 1.0 ± 0.06 | 1.0 ± 0.08 | 0.9 ± 0.09 | 0.9 ± 0.2 | ... | -0.2 ± 0.3 | GB6 J0753+5353 | a |
| 07 57 03 | 09 57 | 120 | 1.3 ± 0.08 | 1.3 ± 0.1 | 1.5 ± 0.1 | 1.4 ± 0.3 | ... | 0.2 ± 0.3 | GB6 J0757+0956 | v |
| 08 05 43 | 61 33 | | 0.7 ± 0.05 | 0.5 ± 0.06 | 0.7 ± 0.08 | 1.0 ± 0.3 | ... | 0.0 ± 0.4 | ... | |
| 08 08 22 | -07 50 | 133 | 1.3 ± 0.05 | 1.3 ± 0.08 | 1.2 ± 0.1 | 1.3 ± 0.2 | 0.9 ± 0.2 | -0.1 ± 0.2 | PMN J0808-0751 | v |
| 08 13 26 | 48 17 | | 1.0 ± 0.06 | 1.0 ± 0.09 | 0.7 ± 0.1 | 0.7 ± 0.2 | ... | -0.4 ± 0.4 | GB6 J0813+4813 | |
| 08 16 19 | -24 25 | 145 | 0.8 ± 0.05 | 1.0 ± 0.06 | 1.1 ± 0.08 | 0.8 ± 0.2 | ... | 0.3 ± 0.3 | PMN J0816-2421 | v |
| 08 23 26 | 22 25 | | 1.1 ± 0.06 | 1.2 ± 0.09 | 1.2 ± 0.1 | 0.6 ± 0.2 | ... | 0.0 ± 0.4 | GB6 J0823+2223 | † |
| 08 24 54 | 39 14 | | 1.2 ± 0.07 | 1.0 ± 0.1 | 1.1 ± 0.1 | 1.1 ± 0.2 | 1.4 ± 0.7 | -0.1 ± 0.3 | GB6 J0824+3916 | a |
| 08 25 50 | 03 11 | 125 | 1.6 ± 0.06 | 1.9 ± 0.09 | 1.9 ± 0.1 | 1.6 ± 0.2 | ... | 0.1 ± 0.2 | GB6 J0825+0309 | v |
| 08 31 00 | 24 11 | 112 | 1.3 ± 0.08 | 1.3 ± 0.1 | 1.5 ± 0.2 | 1.5 ± 0.2 | 1.3 ± 0.3 | 0.2 ± 0.3 | GB6 J0830+2410 | v |
| 08 34 51 | 55 33 | | 0.9 ± 0.06 | 0.7 ± 0.08 | 0.5 ± 0.1 | 1.1 ± 0.4 | 0.7 ± 0.3 | -0.4 ± 0.5 | GB6 J0834+5534 | |
| 08 36 47 | -20 15 | 144 | 2.8 ± 0.05 | 2.4 ± 0.09 | 2.3 ± 0.09 | 1.8 ± 0.2 | 0.8 ± 0.3 | -0.4 ± 0.1 | PMN J0836-2017 | v |
| 08 38 11 | 58 22 | | 1.1 ± 0.04 | 1.1 ± 0.07 | 0.9 ± 0.09 | 1.0 ± 0.2 | ... | -0.2 ± 0.3 | GB6 J0837+5825 | a |
| 08 40 42 | 13 12 | 121 | 1.9 ± 0.07 | 2.0 ± 0.1 | 1.8 ± 0.1 | 1.0 ± 0.2 | ... | -0.1 ± 0.2 | GB6 J0840+1312 | v |
| 08 41 28 | 70 53 | 089 | 1.7 ± 0.04 | 1.7 ± 0.07 | 1.8 ± 0.09 | 1.5 ± 0.2 | 0.5 ± 0.2 | -0.1 ± 0.2 | GB6 J0841+7053 | v |
| 08 47 45 | -07 04 | | 0.9 ± 0.06 | 1.0 ± 0.09 | 1.0 ± 0.1 | 1.2 ± 0.3 | ... | 0.2 ± 0.4 | PMN J0847-0703 | |
| 08 54 47 | 20 06 | 115 | 3.8 ± 0.07 | 4.4 ± 0.1 | 4.1 ± 0.1 | 4.2 ± 0.2 | 3.5 ± 0.5 | 0.1 ± 0.1 | GB6 J0854+2006 | V |
| 09 02 17 | -14 13 | | 1.2 ± 0.06 | 1.3 ± 0.08 | 1.2 ± 0.09 | 1.3 ± 0.1 | ... | 0.1 ± 0.2 | PMN J0902-1415 | |
| 09 07 58 | -20 20 | | 1.1 ± 0.05 | 1.0 ± 0.09 | 0.7 ± 0.1 | 1.0 ± 0.1 | ... | -0.3 ± 0.3 | PMN J0907-2026 | |
| 09 09 16 | 01 19 | 132 | 2.1 ± 0.06 | 2.0 ± 0.1 | 1.9 ± 0.2 | 2.0 ± 0.2 | ... | -0.1 ± 0.2 | GB6 J0909+0121 | v |
| 09 09 48 | 42 53 | | 1.0 ± 0.07 | 1.1 ± 0.1 | 1.2 ± 0.1 | 0.9 ± 0.2 | ... | 0.2 ± 0.4 | GB6 J0909+4253 | |
| 09 14 41 | 02 48 | | 1.4 ± 0.06 | 1.6 ± 0.1 | 1.4 ± 0.1 | 0.8 ± 0.4 | 1.4 ± 0.3 | 0.0 ± 0.2 | GB6 J0914+0245 | |
| 09 18 10 | -12 03 | 143 | 2.0 ± 0.07 | 1.0 ± 0.1 | 0.9 ± 0.2 | 0.9 ± 0.3 | ... | -1.3 ± 0.5 | PMN J0918-1205 | |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|---------------|---------------|-----------------|----------------|-------|
| 09 20 40 | 44 41 | | 1.3 ± 0.07 | 1.4 ± 0.1 | 1.4 ± 0.1 | 1.4 ± 0.2 | 0.6 ± 0.3 | 0.0 ± 0.3 | GB6 J0920+4441 | v |
| 09 21 05 | 62 15 | | 0.9 ± 0.05 | 0.8 ± 0.07 | 0.9 ± 0.1 | ... | ... | -0.1 ± 0.5 | GB6 J0921+6215 | |
| 09 21 39 | -26 19 | | 1.5 ± 0.05 | 1.4 ± 0.08 | 1.3 ± 0.1 | 1.2 ± 0.2 | 0.8 ± 0.3 | -0.2 ± 0.2 | PMN J0921-2618 | v |
| 09 27 05 | 39 01 | 105 | 6.7 ± 0.07 | 5.8 ± 0.1 | 5.5 ± 0.1 | 4.4 ± 0.2 | 2.8 ± 0.3 | -0.4 ± 0.07 | GB6 J0927+3902 | v |
| 09 48 53 | 40 38 | 104 | 1.3 ± 0.06 | 1.5 ± 0.1 | 1.3 ± 0.1 | 0.9 ± 0.2 | 1.0 ± 0.3 | -0.1 ± 0.3 | GB6 J0948+4039 | v |
| 09 55 47 | 69 35 | 088 | 1.3 ± 0.05 | 1.2 ± 0.07 | 1.0 ± 0.07 | 0.9 ± 0.1 | 1.3 ± 0.4 | -0.3 ± 0.2 | GB6 J0955+6940 | |
| 09 57 24 | 55 27 | | 0.9 ± 0.05 | 0.9 ± 0.1 | 1.0 ± 0.1 | 0.8 ± 0.2 | ... | -0.0 ± 0.4 | GB6 J0957+5522 | a |
| 09 58 08 | 47 22 | 098 | 1.6 ± 0.06 | 1.4 ± 0.09 | 1.4 ± 0.09 | 0.9 ± 0.1 | ... | -0.4 ± 0.2 | GB6 J0958+4725 | |
| 09 59 25 | 65 30 | | 0.9 ± 0.05 | 0.9 ± 0.06 | 0.7 ± 0.08 | 0.8 ± 0.1 | 0.8 ± 0.2 | -0.2 ± 0.3 | GB6 J0958+6534 | v |
| 10 14 01 | 23 06 | 119 | 1.1 ± 0.06 | 0.9 ± 0.1 | 0.7 ± 0.07 | 0.7 ± 0.2 | ... | -0.6 ± 0.3 | ... | |
| 10 15 20 | -45 11 | | 1.1 ± 0.04 | 0.8 ± 0.06 | 0.7 ± 0.08 | ... | ... | -0.8 ± 0.4 | PMN J1014-4508 | |
| 10 17 37 | 35 51 | | 0.9 ± 0.05 | 0.9 ± 0.08 | 0.8 ± 0.1 | 0.6 ± 0.2 | 0.9 ± 0.3 | -0.1 ± 0.3 | GB6 J1018+3550 | |
| 10 18 53 | -31 32 | | 0.9 ± 0.05 | 0.9 ± 0.07 | 0.7 ± 0.09 | 0.6 ± 0.2 | ... | -0.3 ± 0.4 | PMN J1018-3123 | |
| 10 21 33 | 40 03 | | 0.9 ± 0.04 | 0.9 ± 0.07 | 0.9 ± 0.08 | ... | ... | -0.1 ± 0.4 | GB6 J1022+4004 | |
| 10 32 33 | 41 18 | 103 | 0.9 ± 0.05 | 0.8 ± 0.09 | 0.7 ± 0.1 | 0.8 ± 0.2 | 0.8 ± 0.3 | -0.2 ± 0.3 | GB6 J1033+4115 | v |
| 10 37 22 | -29 34 | | 1.6 ± 0.06 | 1.6 ± 0.09 | 1.4 ± 0.1 | 1.6 ± 0.3 | 1.7 ± 0.3 | 0.0 ± 0.2 | PMN J1037-2934 | V |
| 10 38 38 | 05 10 | 142 | 1.4 ± 0.06 | 1.5 ± 0.1 | 1.1 ± 0.2 | 1.1 ± 0.2 | 0.9 ± 0.3 | -0.3 ± 0.3 | GB6 J1038+0512 | v |
| 10 41 27 | 06 11 | | 1.2 ± 0.07 | 1.4 ± 0.1 | 1.2 ± 0.1 | 1.1 ± 0.2 | ... | 0.0 ± 0.3 | GB6 J1041+0610 | |
| 10 41 38 | -47 38 | 163 | 1.1 ± 0.05 | ... | 0.5 ± 0.06 | ... | ... | -1.3 ± 0.5 | PMN J1041-4740 | |
| 10 43 01 | 24 07 | | 0.8 ± 0.08 | 0.8 ± 0.1 | 0.8 ± 0.1 | ... | ... | -0.0 ± 0.7 | GB6 J1043+2408 | |
| 10 47 44 | 71 43 | 083 | 1.4 ± 0.06 | 1.4 ± 0.1 | 1.2 ± 0.1 | 1.3 ± 0.3 | ... | -0.1 ± 0.3 | GB6 J1048+7143 | V |
| 10 47 56 | -19 09 | | 1.3 ± 0.06 | 1.1 ± 0.09 | 1.1 ± 0.2 | 1.2 ± 0.3 | ... | -0.3 ± 0.4 | PMN J1048-1909 | |
| 10 53 29 | 81 09 | | 0.9 ± 0.05 | 0.9 ± 0.07 | ... | ... | ... | -0.1 ± 0.6 | ... | |
| 10 58 27 | 01 34 | 149 | 4.6 ± 0.06 | 4.4 ± 0.09 | 4.5 ± 0.1 | 4.4 ± 0.2 | 3.1 ± 0.9 | -0.1 ± 0.08 | GB6 J1058+0133 | V |
| 10 59 22 | -80 03 | 176 | 2.1 ± 0.05 | 2.3 ± 0.07 | 2.2 ± 0.08 | 2.3 ± 0.2 | 1.4 ± 0.3 | 0.0 ± 0.1 | PMN J1058-8003 | V |
| 11 02 13 | -44 03 | | 0.7 ± 0.04 | 0.8 ± 0.05 | 0.8 ± 0.1 | 0.8 ± 0.1 | ... | 0.2 ± 0.3 | PMN J1102-4404 | |
| 11 07 11 | -44 46 | 166 | 1.5 ± 0.04 | 1.5 ± 0.05 | 1.2 ± 0.07 | 1.4 ± 0.2 | 0.9 ± 0.2 | -0.3 ± 0.2 | PMN J1107-4449 | v |
| 11 18 06 | -46 33 | | 1.0 ± 0.04 | 0.8 ± 0.07 | 0.7 ± 0.07 | 0.7 ± 0.3 | ... | -0.5 ± 0.3 | PMN J1118-4634 | |
| 11 18 33 | -12 33 | | 1.0 ± 0.06 | 0.9 ± 0.07 | 0.8 ± 0.09 | 0.9 ± 0.2 | ... | -0.3 ± 0.3 | PMN J1118-1232 | a |
| 11 18 46 | 12 40 | | 0.9 ± 0.06 | 0.9 ± 0.1 | 0.7 ± 0.1 | 0.8 ± 0.2 | ... | -0.3 ± 0.5 | GB6 J1118+1234 | a |
| 11 27 06 | -18 58 | 159 | 1.5 ± 0.06 | 1.5 ± 0.1 | 1.4 ± 0.1 | 1.1 ± 0.2 | 1.3 ± 0.3 | -0.1 ± 0.2 | PMN J1127-1857 | |
| 11 30 12 | -14 51 | 157 | 1.8 ± 0.06 | 1.7 ± 0.1 | 1.9 ± 0.1 | 1.3 ± 0.2 | ... | -0.1 ± 0.2 | PMN J1130-1449 | v |
| 11 30 45 | 38 14 | 101 | 1.2 ± 0.06 | 1.0 ± 0.09 | 1.1 ± 0.1 | 0.8 ± 0.2 | 0.9 ± 0.3 | -0.3 ± 0.3 | GB6 J1130+3815 | a |
| 11 36 57 | -74 16 | | 0.8 ± 0.04 | 0.7 ± 0.07 | 0.5 ± 0.09 | 0.5 ± 0.2 | ... | -0.5 ± 0.5 | PMN J1136-7415 | |
| 11 46 20 | -48 42 | | 0.7 ± 0.04 | 0.7 ± 0.06 | 0.5 ± 0.08 | 0.8 ± 0.1 | ... | 0.0 ± 0.3 | PMN J1145-4836 | a |
| 11 46 43 | 40 01 | | 0.9 ± 0.06 | 1.0 ± 0.07 | 1.1 ± 0.07 | 0.4 ± 0.1 | ... | 0.1 ± 0.3 | GB6 J1146+3958 | a |
| 11 47 07 | -38 11 | 169 | 2.1 ± 0.05 | 2.3 ± 0.09 | 2.2 ± 0.09 | 1.9 ± 0.2 | 1.1 ± 0.2 | -0.1 ± 0.1 | PMN J1147-3812 | V |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | No |
|----------|----------|-----|-----------------|-----------------|----------------|----------------|----------------|-----------------|-----------------|----|
| 11 50 12 | −79 27 | | 1.2 ± 0.04 | 0.7 ± 0.06 | 0.6 ± 0.08 | 0.6 ± 0.1 | ... | -1.1 ± 0.3 | PMN J1150-7918 | |
| 11 50 53 | −00 24 | | 0.8 ± 0.08 | 0.7 ± 0.1 | 0.7 ± 0.2 | ... | ... | -0.2 ± 0.8 | PMN J1150-0024 | |
| 11 53 15 | 49 32 | 090 | 2.1 ± 0.04 | 2.2 ± 0.07 | 2.2 ± 0.08 | 2.0 ± 0.2 | 1.2 ± 0.3 | -0.0 ± 0.1 | GB6 J1153+4931 | |
| 11 55 02 | 81 04 | 078 | 1.2 ± 0.06 | 1.0 ± 0.1 | 0.9 ± 0.09 | 1.0 ± 0.2 | 1.1 ± 0.3 | -0.2 ± 0.3 | 1Jy 1150+81 | |
| 11 57 44 | 16 38 | | 0.8 ± 0.05 | 1.1 ± 0.09 | 0.8 ± 0.09 | 0.8 ± 0.2 | 0.7 ± 0.3 | 0.0 ± 0.3 | GB6 J1157+1639 | |
| 11 59 35 | 29 15 | 111 | 2.0 ± 0.05 | 2.2 ± 0.09 | 2.2 ± 0.1 | 2.0 ± 0.2 | 2.0 ± 0.4 | 0.0 ± 0.1 | GB6 J1159+2914 | |
| 12 03 30 | 48 08 | | 0.8 ± 0.04 | 0.7 ± 0.06 | 0.6 ± 0.08 | 0.7 ± 0.3 | 0.6 ± 0.2 | -0.3 ± 0.3 | GB6 J1203+4803 | |
| 12 09 02 | −24 03 | 172 | 1.3 ± 0.06 | 1.0 ± 0.09 | 0.9 ± 0.09 | ... | ... | -0.6 ± 0.4 | PMN J1209-2406 | |
| 12 15 56 | −17 29 | 173 | 1.4 ± 0.06 | 1.2 ± 0.1 | 1.1 ± 0.1 | 0.8 ± 0.2 | ... | -0.4 ± 0.3 | PMN J1215-1731 | |
| 12 18 53 | 48 30 | | 0.7 ± 0.03 | 0.7 ± 0.05 | 0.7 ± 0.08 | 0.7 ± 0.1 | 0.6 ± 0.2 | 0.0 ± 0.3 | GB6 J1219+4830 | |
| 12 19 21 | 05 49 | 164 | 2.7 ± 0.06 | 2.2 ± 0.1 | 2.0 ± 0.1 | 1.4 ± 0.2 | 2.0 ± 0.6 | -0.5 ± 0.2 | GB6 J1219+0549A | |
| 12 22 06 | 04 14 | | 0.7 ± 0.07 | 0.7 ± 0.1 | 1.0 ± 0.2 | ... | ... | 0.4 ± 0.7 | GB6 J1222+0413 | |
| 12 23 53 | −83 06 | 178 | 0.8 ± 0.06 | 0.9 ± 0.06 | 0.8 ± 0.06 | 0.7 ± 0.1 | 0.8 ± 0.3 | -0.1 ± 0.3 | PMN J1224-8312 | |
| 12 29 06 | 02 03 | 170 | 20.0 ± 0.06 | 18.4 ± 0.1 | 16.8 ± 0.1 | 14.6 ± 0.2 | 10.5 ± 0.4 | -0.3 ± 0.02 | GB6 J1229+0202 | |
| 12 30 51 | 12 23 | 165 | 19.7 ± 0.06 | 15.5 ± 0.09 | 13.3 ± 0.1 | 9.7 ± 0.2 | 6.2 ± 0.4 | -0.7 ± 0.02 | GB6 J1230+1223 | |
| 12 39 25 | 07 28 | | 1.0 ± 0.06 | 1.0 ± 0.1 | 0.9 ± 0.09 | 1.0 ± 0.2 | ... | -0.2 ± 0.3 | GB6 J1239+0730 | |
| 12 46 53 | −25 47 | 177 | 1.3 ± 0.06 | 1.4 ± 0.1 | 1.6 ± 0.1 | 1.5 ± 0.2 | 1.4 ± 0.5 | 0.2 ± 0.2 | PMN J1246-2547 | |
| 12 48 50 | −46 00 | | 0.8 ± 0.08 | 0.8 ± 0.1 | 0.9 ± 0.09 | 0.9 ± 0.2 | 1.4 ± 0.3 | 0.3 ± 0.3 | PMN J1248-4559 | |
| 12 54 50 | 11 42 | | 0.9 ± 0.06 | 0.9 ± 0.08 | 0.8 ± 0.09 | ... | ... | -0.2 ± 0.4 | GB6 J1254+1141 | |
| 12 56 12 | −05 47 | 181 | 17.1 ± 0.06 | 17.9 ± 0.1 | 18.2 ± 0.1 | 17.0 ± 0.2 | 13.3 ± 0.4 | 0.0 ± 0.02 | PMN J1256-0547 | |
| 12 58 09 | −31 58 | 180 | 1.3 ± 0.05 | 1.1 ± 0.07 | 1.1 ± 0.1 | 0.5 ± 0.2 | 1.6 ± 0.5 | -0.2 ± 0.3 | PMN J1257-3154 | |
| 12 58 26 | 32 26 | | 0.7 ± 0.05 | 0.6 ± 0.09 | 0.8 ± 0.1 | 0.5 ± 0.2 | 0.5 ± 0.2 | -0.1 ± 0.5 | GB6 J1257+3229 | |
| 12 58 54 | −22 23 | | 1.0 ± 0.06 | 0.8 ± 0.1 | 0.8 ± 0.1 | 0.7 ± 0.2 | ... | -0.3 ± 0.4 | PMN J1258-2219 | |
| 12 59 27 | 51 41 | | 0.6 ± 0.06 | 0.6 ± 0.09 | 0.6 ± 0.1 | 0.9 ± 0.2 | 1.0 ± 0.3 | 0.4 ± 0.4 | GB6 J1259+5141 | |
| 13 02 22 | 57 48 | | 0.8 ± 0.05 | 0.7 ± 0.06 | 0.5 ± 0.09 | 0.6 ± 0.2 | 0.6 ± 0.2 | -0.4 ± 0.4 | GB6 J1302+5748 | |
| 13 05 54 | −49 30 | | 1.1 ± 0.05 | 1.0 ± 0.08 | 0.8 ± 0.09 | 1.1 ± 0.2 | 1.0 ± 0.3 | -0.1 ± 0.3 | PMN J1305-4928 | |
| 13 10 38 | 32 22 | 052 | 2.5 ± 0.05 | 2.5 ± 0.09 | 2.3 ± 0.1 | 1.6 ± 0.2 | ... | -0.2 ± 0.1 | GB6 J1310+3220 | |
| 13 16 06 | −33 37 | 182 | 1.7 ± 0.06 | 1.7 ± 0.09 | 1.9 ± 0.1 | 1.9 ± 0.2 | 1.6 ± 0.4 | 0.1 ± 0.2 | PMN J1316-3339 | |
| 13 24 32 | −10 47 | | 0.8 ± 0.08 | 0.8 ± 0.1 | 0.9 ± 0.1 | 1.2 ± 0.2 | 2.1 ± 0.6 | 0.5 ± 0.4 | PMN J1324-1049 | |
| 13 27 35 | 22 13 | | 0.9 ± 0.06 | 0.8 ± 0.08 | 0.7 ± 0.1 | 0.4 ± 0.2 | ... | -0.4 ± 0.5 | GB6 J1327+2210 | |
| 13 29 01 | 32 00 | 040 | 0.8 ± 0.04 | 0.6 ± 0.08 | 0.4 ± 0.07 | 0.4 ± 0.2 | ... | -0.9 ± 0.5 | ... | |
| 13 30 53 | 25 02 | | 1.1 ± 0.05 | 1.0 ± 0.07 | 0.9 ± 0.09 | 0.8 ± 0.1 | 0.7 ± 0.2 | -0.4 ± 0.3 | GB6 J1330+2509 | |
| 13 31 17 | 30 30 | 026 | 2.2 ± 0.05 | 1.8 ± 0.09 | 1.4 ± 0.1 | 1.2 ± 0.2 | ... | -0.7 ± 0.2 | GB6 J1331+3030 | |
| 13 32 52 | 02 00 | | 1.4 ± 0.05 | 1.4 ± 0.09 | 1.3 ± 0.1 | 1.2 ± 0.2 | 1.2 ± 0.3 | -0.1 ± 0.2 | GB6 J1332+0200 | |
| 13 33 29 | 27 23 | | 0.8 ± 0.06 | 0.9 ± 0.08 | 0.8 ± 0.08 | 0.7 ± 0.1 | ... | -0.1 ± 0.4 | GB6 J1333+2725 | |
| 13 36 50 | −33 58 | 185 | 1.9 ± 0.06 | 1.5 ± 0.07 | 1.2 ± 0.09 | 1.1 ± 0.2 | ... | -0.7 ± 0.2 | PMN J1336-3358 | |
| 13 37 40 | −12 57 | 188 | 5.8 ± 0.06 | 6.0 ± 0.1 | 6.1 ± 0.1 | 5.7 ± 0.2 | 3.9 ± 0.3 | 0.0 ± 0.06 | PMN J1337-1257 | |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|---------------|---------------|-----------------|----------------|-------|
| 13 44 00 | 66 01 | | 0.7 ± 0.07 | 0.4 ± 0.1 | 0.5 ± 0.1 | 0.2 ± 0.1 | 0.9 ± 0.2 | -0.2 ± 0.4 | GB6 J1344+6606 | a |
| 13 47 48 | 12 18 | | 1.0 ± 0.06 | 1.1 ± 0.09 | 0.9 ± 0.1 | 0.9 ± 0.2 | ... | -0.0 ± 0.4 | GB6 J1347+1217 | |
| 13 54 51 | -10 41 | 197 | 1.6 ± 0.06 | 1.2 ± 0.1 | 1.2 ± 0.2 | 1.4 ± 0.3 | 0.7 ± 0.3 | -0.4 ± 0.3 | PMN J1354-1041 | v |
| 13 55 56 | 76 47 | | 0.7 ± 0.06 | 0.8 ± 0.1 | 0.4 ± 0.1 | ... | ... | -0.3 ± 0.8 | ... | d |
| 13 56 53 | -15 25 | | 0.8 ± 0.08 | 0.9 ± 0.2 | 0.7 ± 0.2 | 0.8 ± 0.3 | 0.9 ± 0.3 | 0.0 ± 0.5 | PMN J1357-1527 | v |
| 13 56 56 | 19 19 | 004 | 1.4 ± 0.06 | 1.6 ± 0.09 | 1.4 ± 0.1 | 1.4 ± 0.2 | ... | 0.1 ± 0.2 | GB6 J1357+1919 | v |
| 14 08 53 | -07 49 | 203 | 1.1 ± 0.07 | 1.0 ± 0.1 | 1.0 ± 0.1 | 0.6 ± 0.2 | ... | -0.3 ± 0.4 | 1Jy 1406-076 | |
| 14 11 25 | 52 17 | | 0.9 ± 0.05 | 0.3 ± 0.1 | ... | ... | ... | -2.8 ± 2 | GB6 J1411+5212 | |
| 14 15 46 | 13 22 | | 0.9 ± 0.06 | 1.0 ± 0.09 | 0.8 ± 0.09 | 1.1 ± 0.5 | 0.8 ± 0.3 | 0.1 ± 0.4 | GB6 J1415+1320 | |
| 14 19 32 | 54 25 | | 0.8 ± 0.06 | 0.8 ± 0.09 | 0.8 ± 0.08 | 1.3 ± 0.2 | ... | 0.2 ± 0.4 | GB6 J1419+5423 | a,v |
| 14 19 38 | 38 22 | 042 | 1.1 ± 0.04 | 1.2 ± 0.06 | 1.1 ± 0.06 | 1.3 ± 0.1 | ... | 0.2 ± 0.2 | GB6 J1419+3822 | V |
| 14 20 07 | 27 04 | | 0.9 ± 0.06 | 1.1 ± 0.08 | 1.0 ± 0.07 | 0.8 ± 0.1 | 1.0 ± 0.2 | 0.1 ± 0.3 | GB6 J1419+2706 | a |
| 14 27 28 | -33 02 | 193 | 1.0 ± 0.06 | 1.4 ± 0.09 | 1.7 ± 0.1 | 1.5 ± 0.2 | ... | 0.6 ± 0.3 | PMN J1427-3306 | |
| 14 27 53 | -42 06 | 191 | 3.1 ± 0.05 | 2.9 ± 0.08 | 2.8 ± 0.1 | 2.7 ± 0.2 | 1.9 ± 0.3 | -0.2 ± 0.1 | PMN J1427-4206 | v |
| 14 37 02 | 63 37 | | 0.5 ± 0.06 | ... | ... | 0.7 ± 0.2 | ... | 0.3 ± 0.7 | GB6 J1436+6336 | a |
| 14 42 57 | 51 55 | | 0.8 ± 0.05 | 0.9 ± 0.07 | 0.8 ± 0.08 | 0.9 ± 0.2 | 1.0 ± 0.3 | 0.1 ± 0.3 | GB6 J1443+5201 | |
| 14 46 55 | -16 21 | | 1.0 ± 0.06 | 1.0 ± 0.09 | 0.8 ± 0.09 | 0.9 ± 0.1 | ... | -0.3 ± 0.3 | ... | |
| 14 57 20 | -35 36 | | 0.8 ± 0.1 | 0.9 ± 0.1 | 1.0 ± 0.1 | 0.9 ± 0.2 | 1.0 ± 0.4 | 0.2 ± 0.4 | PMN J1457-3538 | |
| 14 58 32 | 71 40 | 071 | 1.3 ± 0.07 | 1.2 ± 0.1 | 0.9 ± 0.09 | ... | 0.6 ± 0.2 | -0.6 ± 0.3 | GB6 J1459+7140 | v |
| 15 04 32 | 10 30 | 006 | 1.6 ± 0.05 | 1.5 ± 0.09 | 1.3 ± 0.09 | 0.8 ± 0.1 | ... | -0.4 ± 0.2 | GB6 J1504+1029 | V |
| 15 06 55 | -16 44 | | 1.4 ± 0.08 | 1.3 ± 0.2 | 1.0 ± 0.2 | 0.8 ± 0.2 | ... | -0.5 ± 0.4 | PMN J1507-1652 | a |
| 15 10 38 | -05 46 | | 1.1 ± 0.07 | 1.1 ± 0.1 | 1.1 ± 0.1 | 0.8 ± 0.2 | ... | -0.1 ± 0.4 | PMN J1510-0543 | |
| 15 12 46 | -09 04 | 207 | 1.8 ± 0.06 | 1.7 ± 0.1 | 1.9 ± 0.1 | 1.9 ± 0.2 | 1.6 ± 0.4 | 0.0 ± 0.2 | 1Jy 1510-08 | v |
| 15 13 49 | -10 00 | | 1.3 ± 0.06 | 1.0 ± 0.1 | 0.9 ± 0.2 | 1.3 ± 0.3 | ... | -0.3 ± 0.4 | ... | |
| 15 16 38 | 00 14 | 002 | 1.6 ± 0.06 | 1.8 ± 0.09 | 1.7 ± 0.1 | 1.5 ± 0.2 | 0.7 ± 0.3 | 0.0 ± 0.2 | GB6 J1516+0015 | |
| 15 17 44 | -24 21 | 205 | 2.0 ± 0.06 | 2.1 ± 0.1 | 2.1 ± 0.1 | 2.0 ± 0.2 | 2.3 ± 0.5 | 0.0 ± 0.2 | PMN J1517-2422 | |
| 15 40 58 | 14 47 | | 1.0 ± 0.06 | 0.8 ± 0.09 | 0.8 ± 0.1 | 0.8 ± 0.2 | ... | -0.4 ± 0.4 | GB6 J1540+1447 | |
| 15 49 21 | 50 36 | | 0.9 ± 0.06 | 0.8 ± 0.09 | 1.0 ± 0.1 | 0.7 ± 0.2 | 0.6 ± 0.3 | -0.1 ± 0.4 | GB6 J1549+5038 | |
| 15 49 32 | 02 36 | 005 | 2.7 ± 0.06 | 2.9 ± 0.1 | 2.4 ± 0.1 | 2.1 ± 0.2 | 2.2 ± 0.6 | -0.2 ± 0.1 | GB6 J1549+0237 | V |
| 15 50 39 | 05 26 | 007 | 2.5 ± 0.06 | 2.1 ± 0.09 | 1.9 ± 0.1 | 2.0 ± 0.2 | 1.4 ± 0.3 | -0.4 ± 0.2 | GB6 J1550+0527 | |
| 16 02 00 | 33 29 | | 0.9 ± 0.04 | 0.8 ± 0.06 | 0.8 ± 0.06 | 0.5 ± 0.1 | 0.8 ± 0.3 | -0.2 ± 0.3 | GB6 J1602+3326 | |
| 16 04 34 | 57 18 | | 0.7 ± 0.04 | 0.7 ± 0.07 | 0.8 ± 0.06 | 0.5 ± 0.1 | 0.6 ± 0.2 | -0.1 ± 0.3 | GB6 J1604+5714 | a |
| 16 08 52 | 10 27 | 009 | 2.0 ± 0.06 | 2.0 ± 0.1 | 1.9 ± 0.1 | 1.5 ± 0.2 | 1.1 ± 0.4 | -0.2 ± 0.2 | GB6 J1608+1029 | V |
| 16 13 42 | 34 12 | 023 | 4.1 ± 0.05 | 3.7 ± 0.08 | 3.4 ± 0.08 | 2.8 ± 0.2 | 1.8 ± 0.3 | -0.3 ± 0.08 | GB6 J1613+3412 | V |
| 16 18 01 | -77 16 | 183 | 2.4 ± 0.05 | 2.1 ± 0.07 | 1.9 ± 0.08 | 1.5 ± 0.2 | 0.9 ± 0.2 | -0.4 ± 0.1 | PMN J1617-7717 | |
| 16 23 25 | -68 17 | | 0.7 ± 0.04 | 0.6 ± 0.06 | 0.6 ± 0.07 | ... | ... | -0.3 ± 0.4 | PMN J1624-6809 | |
| 16 26 17 | 41 27 | | 0.9 ± 0.05 | 0.8 ± 0.08 | 0.7 ± 0.08 | 0.7 ± 0.2 | ... | -0.3 ± 0.3 | GB6 J1625+4134 | a |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|----------------|---------------|-----------------|----------------|-------|
| 16 33 20 | 82 26 | 076 | 1.3 ± 0.04 | 1.5 ± 0.07 | 1.5 ± 0.08 | 1.2 ± 0.1 | 0.7 ± 0.3 | -0.0 ± 0.2 | ... | e |
| 16 35 16 | 38 07 | 033 | 3.9 ± 0.05 | 4.3 ± 0.08 | 4.2 ± 0.08 | 3.8 ± 0.1 | 3.1 ± 0.3 | 0.1 ± 0.07 | GB6 J1635+3808 | V |
| 16 37 31 | 47 13 | | 0.9 ± 0.05 | 1.0 ± 0.08 | 1.0 ± 0.1 | 0.9 ± 0.1 | ... | 0.0 ± 0.3 | GB6 J1637+4717 | |
| 16 37 52 | -77 14 | | 1.4 ± 0.05 | 0.9 ± 0.09 | 0.8 ± 0.09 | 0.7 ± 0.1 | ... | -0.8 ± 0.3 | PMN J1636-7713 | |
| 16 38 16 | 57 22 | 056 | 1.3 ± 0.04 | 1.3 ± 0.07 | 1.4 ± 0.08 | 1.7 ± 0.2 | 1.0 ± 0.3 | 0.1 ± 0.2 | GB6 J1638+5720 | |
| 16 42 34 | 68 54 | 069 | 1.4 ± 0.05 | 1.5 ± 0.08 | 1.5 ± 0.09 | 1.7 ± 0.2 | 1.2 ± 0.2 | 0.0 ± 0.2 | GB6 J1642+6856 | a,V |
| 16 42 55 | 39 48 | 035 | 6.5 ± 0.05 | 6.0 ± 0.08 | 5.5 ± 0.08 | 4.9 ± 0.2 | 3.9 ± 0.3 | -0.3 ± 0.05 | GB6 J1642+3948 | V |
| 16 51 07 | 04 58 | 010 | 1.6 ± 0.07 | 1.1 ± 0.1 | 1.0 ± 0.2 | 0.7 ± 0.1 | ... | -0.9 ± 0.4 | GB6 J1651+0459 | |
| 16 54 10 | 39 39 | 036 | 1.2 ± 0.05 | 1.2 ± 0.08 | 0.9 ± 0.07 | 0.5 ± 0.2 | ... | -0.5 ± 0.3 | GB6 J1653+3945 | a |
| 16 57 01 | 57 06 | | 0.5 ± 0.06 | 0.6 ± 0.09 | 0.6 ± 0.1 | 0.7 ± 0.1 | 0.8 ± 0.2 | 0.4 ± 0.4 | GB6 J1657+5705 | |
| 16 57 26 | 47 54 | | 1.1 ± 0.04 | 0.9 ± 0.06 | 0.7 ± 0.06 | ... | ... | -0.6 ± 0.3 | ... | f |
| 16 58 05 | 07 42 | 013 | 1.4 ± 0.05 | 1.5 ± 0.07 | 1.4 ± 0.1 | 1.6 ± 0.2 | 1.6 ± 0.7 | 0.1 ± 0.2 | GB6 J1658+0741 | V |
| 16 58 51 | 05 13 | | 0.8 ± 0.06 | 0.6 ± 0.09 | 0.5 ± 0.09 | 0.4 ± 0.2 | ... | -0.8 ± 0.5 | GB6 J1658+0515 | |
| 16 59 52 | 68 27 | | 0.2 ± 0.06 | 0.5 ± 0.08 | 0.6 ± 0.08 | 0.7 ± 0.09 | 0.6 ± 0.1 | 0.5 ± 0.5 | GB6 J1700+6830 | |
| 17 03 37 | -62 14 | 198 | 1.7 ± 0.04 | 1.7 ± 0.07 | 1.7 ± 0.07 | 1.4 ± 0.1 | ... | -0.1 ± 0.2 | PMN J1703-6212 | v |
| 17 07 37 | 01 48 | | 0.8 ± 0.06 | 0.9 ± 0.1 | 0.7 ± 0.08 | 0.8 ± 0.2 | ... | -0.0 ± 0.4 | GB6 J1707+0148 | |
| 17 15 50 | 68 39 | | 0.6 ± 0.04 | 0.6 ± 0.06 | 0.6 ± 0.07 | ... | 0.7 ± 0.2 | 0.1 ± 0.4 | GB6 J1716+6836 | |
| 17 24 00 | -65 00 | 196 | 2.3 ± 0.05 | 2.0 ± 0.08 | 1.6 ± 0.09 | 1.1 ± 0.2 | 1.2 ± 0.3 | -0.6 ± 0.2 | PMN J1723-6500 | |
| 17 27 23 | 45 30 | 043 | 0.9 ± 0.04 | 1.0 ± 0.08 | 0.8 ± 0.07 | 1.2 ± 0.2 | 1.1 ± 0.3 | 0.1 ± 0.3 | GB6 J1727+4530 | V |
| 17 34 16 | 38 57 | 038 | 1.2 ± 0.05 | 1.3 ± 0.08 | 1.2 ± 0.09 | 1.3 ± 0.2 | ... | 0.1 ± 0.2 | GB6 J1734+3857 | |
| 17 36 12 | -79 34 | 186 | 1.0 ± 0.04 | 1.1 ± 0.07 | 1.2 ± 0.07 | 0.9 ± 0.1 | ... | 0.1 ± 0.2 | PMN J1733-7935 | |
| 17 38 26 | 50 15 | | 0.8 ± 0.04 | 0.5 ± 0.08 | 0.6 ± 0.08 | 0.5 ± 0.1 | ... | -0.5 ± 0.4 | ... | |
| 17 40 11 | 47 40 | | 0.8 ± 0.05 | 0.8 ± 0.06 | 0.9 ± 0.08 | 0.8 ± 0.2 | ... | 0.1 ± 0.3 | GB6 J1739+4738 | |
| 17 40 34 | 52 12 | 048 | 1.2 ± 0.04 | 1.2 ± 0.07 | 1.3 ± 0.1 | 1.2 ± 0.2 | 0.8 ± 0.3 | -0.0 ± 0.2 | GB6 J1740+5211 | |
| 17 48 55 | 70 06 | 068 | 0.6 ± 0.03 | 0.7 ± 0.06 | 0.8 ± 0.06 | 1.0 ± 0.1 | 0.7 ± 0.1 | 0.4 ± 0.2 | GB6 J1748+7005 | |
| 17 53 24 | 44 08 | | 0.7 ± 0.06 | 0.6 ± 0.1 | 0.8 ± 0.09 | ... | 1.1 ± 0.3 | 0.3 ± 0.4 | GB6 J1753+4410 | |
| 17 53 33 | 28 48 | 022 | 2.1 ± 0.05 | 1.9 ± 0.07 | 2.1 ± 0.08 | 2.2 ± 0.2 | 1.6 ± 0.7 | -0.0 ± 0.1 | GB6 J1753+2847 | v |
| 17 58 58 | 66 32 | 064 | 0.6 ± 0.02 | 0.6 ± 0.03 | 0.6 ± 0.05 | 0.4 ± 0.1 | ... | -0.1 ± 0.2 | GB6 J1758+6638 | a |
| 17 59 50 | 38 52 | | 0.9 ± 0.05 | 0.8 ± 0.07 | 0.7 ± 0.1 | ... | ... | -0.4 ± 0.5 | GB6 J1800+3848 | a |
| 18 00 27 | 78 27 | 072 | 1.8 ± 0.05 | 1.7 ± 0.07 | 1.6 ± 0.08 | 1.5 ± 0.2 | 0.9 ± 0.2 | -0.3 ± 0.2 | 1Jy 1803+78 | v |
| 18 01 32 | 44 04 | | 1.2 ± 0.04 | 1.4 ± 0.07 | 1.6 ± 0.1 | 1.5 ± 0.2 | 1.1 ± 0.2 | 0.2 ± 0.2 | GB6 J1801+4404 | v |
| 18 03 00 | -65 07 | 199 | 1.2 ± 0.05 | 1.1 ± 0.08 | 1.3 ± 0.09 | 1.1 ± 0.2 | 0.9 ± 0.2 | -0.0 ± 0.2 | PMN J1803-6507 | v |
| 18 06 47 | 69 49 | 067 | 1.4 ± 0.03 | 1.4 ± 0.06 | 1.2 ± 0.07 | 1.4 ± 0.1 | 1.2 ± 0.3 | -0.1 ± 0.1 | GB6 J1806+6949 | v |
| 18 08 32 | 56 58 | | 0.6 ± 0.05 | 0.7 ± 0.06 | 0.8 ± 0.06 | 0.7 ± 0.09 | ... | 0.3 ± 0.3 | GB6 J1808+5709 | a |
| 18 19 57 | -55 21 | | 0.9 ± 0.07 | 0.5 ± 0.2 | 0.6 ± 0.1 | ... | ... | -0.8 ± 0.8 | PMN J1819-5521 | |
| 18 20 03 | -63 43 | 200 | 1.7 ± 0.05 | 1.5 ± 0.08 | 1.2 ± 0.09 | 1.2 ± 0.2 | 1.2 ± 0.2 | -0.3 ± 0.2 | PMN J1819-6345 | |
| 18 24 09 | 56 50 | 053 | 1.5 ± 0.04 | 1.3 ± 0.07 | 1.3 ± 0.09 | 1.4 ± 0.2 | 0.8 ± 0.2 | -0.3 ± 0.2 | GB6 J1824+5650 | |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|-----------------|----------------|----------------|----------------|---------------|-----------------|----------------|-------|
| 18 25 37 | 67 37 | | ... | ... | 0.3 ± 0.09 | 0.6 ± 0.1 | 0.6 ± 0.1 | 0.7 ± 0.8 | ... | |
| 18 29 42 | 48 45 | 046 | 2.8 ± 0.04 | 2.8 ± 0.07 | 2.6 ± 0.08 | 2.0 ± 0.1 | 1.3 ± 0.2 | -0.2 ± 0.1 | GB6 J1829+4844 | v |
| 18 32 41 | 68 44 | | ... | ... | 0.4 ± 0.07 | 0.7 ± 0.06 | 0.7 ± 0.1 | 0.8 ± 0.8 | GB6 J1832+6848 | |
| 18 34 21 | -58 54 | | 1.1 ± 0.04 | 1.1 ± 0.07 | 1.2 ± 0.08 | 0.9 ± 0.2 | ... | 0.1 ± 0.3 | PMN J1834-5856 | |
| 18 35 03 | 32 45 | | 0.8 ± 0.05 | 0.8 ± 0.07 | 0.7 ± 0.07 | 0.5 ± 0.2 | 0.7 ± 0.2 | -0.2 ± 0.3 | GB6 J1835+3241 | |
| 18 37 23 | -71 06 | 192 | 1.9 ± 0.04 | 1.7 ± 0.06 | 1.5 ± 0.06 | 1.2 ± 0.1 | ... | -0.4 ± 0.1 | PMN J1837-7108 | |
| 18 40 49 | 79 46 | 073 | 1.3 ± 0.04 | 0.9 ± 0.08 | 0.7 ± 0.1 | ... | ... | -1.0 ± 0.4 | 1Jy 1845+79 | |
| 18 42 52 | 68 08 | 066 | 1.1 ± 0.03 | 1.2 ± 0.05 | 1.2 ± 0.05 | 1.0 ± 0.08 | 0.6 ± 0.2 | -0.0 ± 0.1 | GB6 J1842+6809 | a |
| 18 48 40 | 32 23 | | 0.7 ± 0.05 | 0.8 ± 0.1 | 0.5 ± 0.1 | ... | ... | -0.3 ± 0.8 | GB6 J1848+3219 | |
| 18 49 38 | 67 05 | 065 | 1.2 ± 0.04 | 1.4 ± 0.06 | 1.4 ± 0.05 | 1.2 ± 0.1 | 1.4 ± 0.2 | 0.1 ± 0.1 | GB6 J1849+6705 | a,V |
| 18 50 45 | 28 23 | 028 | 1.5 ± 0.04 | 1.1 ± 0.07 | 0.9 ± 0.05 | 0.6 ± 0.1 | ... | -0.9 ± 0.2 | GB6 J1850+2825 | |
| 19 02 53 | 31 53 | 034 | 1.3 ± 0.04 | 1.1 ± 0.06 | 0.8 ± 0.07 | 0.4 ± 0.2 | ... | -0.8 ± 0.3 | GB6 J1902+3159 | |
| 19 15 56 | -80 00 | | 0.7 ± 0.04 | 0.4 ± 0.07 | 0.5 ± 0.07 | ... | ... | -0.9 ± 0.5 | PMN J1918-7957 | |
| 19 23 30 | -21 05 | 008 | 2.3 ± 0.06 | 2.5 ± 0.1 | 2.5 ± 0.1 | 2.6 ± 0.2 | 2.0 ± 0.4 | 0.1 ± 0.1 | PMN J1923-2104 | v |
| 19 24 51 | -29 14 | | 12.3 ± 0.06 | 12.0 ± 0.1 | 11.4 ± 0.1 | 10.9 ± 0.2 | 7.6 ± 0.4 | -0.1 ± 0.03 | PMN J1924-2914 | |
| 19 27 36 | 61 19 | 059 | 1.0 ± 0.04 | 1.0 ± 0.07 | 1.0 ± 0.08 | 0.7 ± 0.1 | 0.6 ± 0.2 | -0.2 ± 0.3 | GB6 J1927+6117 | |
| 19 27 42 | 73 57 | 070 | 3.5 ± 0.04 | 3.2 ± 0.06 | 2.8 ± 0.07 | 2.7 ± 0.1 | 1.3 ± 0.3 | -0.3 ± 0.07 | GB6 J1927+7357 | V |
| 19 37 07 | -39 57 | | 1.0 ± 0.07 | 1.3 ± 0.1 | 1.3 ± 0.1 | 1.4 ± 0.2 | ... | 0.3 ± 0.3 | PMN J1937-3957 | V |
| 19 38 15 | -63 44 | | 0.9 ± 0.05 | 0.7 ± 0.07 | 0.6 ± 0.08 | ... | ... | -0.6 ± 0.4 | PMN J1939-6342 | a |
| 19 39 24 | -15 25 | | 1.0 ± 0.07 | 1.0 ± 0.09 | 1.0 ± 0.09 | 0.6 ± 0.2 | ... | -0.1 ± 0.4 | PMN J1939-1525 | |
| 19 51 28 | 67 49 | | 0.7 ± 0.04 | 0.9 ± 0.05 | 0.7 ± 0.05 | 0.7 ± 0.08 | 0.7 ± 0.2 | 0.1 ± 0.2 | GB6 J1951+6743 | |
| 19 52 19 | 02 33 | | 0.8 ± 0.07 | 0.6 ± 0.09 | 0.6 ± 0.08 | 0.9 ± 0.2 | ... | -0.3 ± 0.5 | GB6 J1952+0230 | |
| 19 55 46 | 51 39 | 051 | 0.8 ± 0.05 | 0.9 ± 0.1 | 0.8 ± 0.09 | ... | ... | 0.1 ± 0.4 | GB6 J1955+5131 | |
| 19 58 02 | -38 45 | 003 | 3.4 ± 0.06 | 3.5 ± 0.09 | 3.1 ± 0.1 | 2.7 ± 0.2 | 1.9 ± 0.5 | -0.1 ± 0.1 | PMN J1957-3845 | v |
| 20 00 58 | -17 49 | 011 | 2.0 ± 0.07 | 1.9 ± 0.09 | 1.8 ± 0.1 | 1.8 ± 0.2 | 2.0 ± 0.8 | -0.1 ± 0.2 | PMN J2000-1748 | V |
| 20 05 43 | 77 55 | | 0.8 ± 0.05 | 0.7 ± 0.1 | 0.8 ± 0.1 | 0.8 ± 0.2 | 0.9 ± 0.2 | 0.0 ± 0.3 | 1Jy 2007+77 | v |
| 20 08 21 | 66 12 | | 0.7 ± 0.03 | 0.5 ± 0.05 | 0.5 ± 0.05 | 0.6 ± 0.2 | ... | -0.5 ± 0.3 | GB6 J2007+6607 | |
| 20 10 03 | 72 31 | | 0.7 ± 0.06 | 0.6 ± 0.08 | 1.0 ± 0.07 | 1.0 ± 0.2 | 0.7 ± 0.2 | 0.4 ± 0.3 | GB6 J2009+7229 | |
| 20 11 19 | -15 47 | 014 | 1.6 ± 0.05 | 1.5 ± 0.1 | 1.5 ± 0.2 | 1.2 ± 0.3 | ... | -0.2 ± 0.3 | PMN J2011-1546 | |
| 20 22 30 | 61 36 | 063 | 1.6 ± 0.05 | 1.4 ± 0.07 | 1.2 ± 0.07 | 0.7 ± 0.1 | ... | -0.5 ± 0.2 | GB6 J2022+6137 | |
| 20 23 38 | 54 26 | | 0.7 ± 0.07 | 0.9 ± 0.07 | 0.8 ± 0.08 | 0.8 ± 0.1 | ... | 0.1 ± 0.4 | GB6 J2023+5427 | |
| 20 24 31 | 17 12 | 031 | 0.9 ± 0.04 | 1.0 ± 0.08 | 0.9 ± 0.09 | 0.8 ± 0.1 | 0.8 ± 0.3 | -0.1 ± 0.3 | GB6 J2024+1718 | a |
| 20 34 54 | -68 45 | 194 | 0.7 ± 0.05 | 0.8 ± 0.08 | 0.8 ± 0.08 | 0.8 ± 0.09 | ... | 0.2 ± 0.3 | PMN J2035-6846 | |
| 20 35 20 | 10 55 | | 0.6 ± 0.06 | 1.1 ± 0.1 | 0.7 ± 0.1 | 0.9 ± 0.2 | 1.0 ± 0.3 | 0.3 ± 0.3 | GB6 J2035+1055 | |
| 20 56 11 | -47 16 | 208 | 2.2 ± 0.05 | 2.5 ± 0.08 | 2.4 ± 0.1 | 2.2 ± 0.2 | 1.7 ± 0.4 | 0.1 ± 0.1 | PMN J2056-4714 | V |
| 21 01 37 | 03 44 | | 1.2 ± 0.05 | 1.1 ± 0.08 | 1.0 ± 0.2 | 1.0 ± 0.2 | 0.9 ± 0.3 | -0.2 ± 0.3 | GB6 J2101+0341 | v |
| 21 09 31 | -41 13 | 001 | 1.5 ± 0.06 | 1.6 ± 0.1 | 1.2 ± 0.1 | 1.1 ± 0.2 | 1.0 ± 0.3 | -0.3 ± 0.2 | PMN J2109-4110 | |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|---------------|---------------|-----------------|----------------|-------|
| 21 09 39 | 35 37 | 049 | 0.9 ± 0.06 | 0.7 ± 0.08 | 0.6 ± 0.07 | 0.8 ± 0.2 | ... | -0.4 ± 0.4 | GB6 J2109+3532 | a,v |
| 21 23 42 | 05 36 | 027 | 2.2 ± 0.06 | 1.8 ± 0.1 | 1.8 ± 0.1 | 1.3 ± 0.2 | ... | -0.4 ± 0.2 | GB6 J2123+0535 | v |
| 21 24 10 | 25 07 | | 0.8 ± 0.06 | 0.6 ± 0.09 | 0.4 ± 0.08 | 0.5 ± 0.2 | ... | -0.9 ± 0.6 | GB6 J2123+2504 | |
| 21 31 32 | -12 07 | 017 | 2.7 ± 0.06 | 2.4 ± 0.1 | 2.4 ± 0.1 | 1.7 ± 0.2 | 1.6 ± 0.5 | -0.3 ± 0.1 | PMN J2131-1207 | v |
| 21 34 08 | -01 54 | 020 | 2.0 ± 0.06 | 1.9 ± 0.1 | 1.7 ± 0.1 | 1.6 ± 0.2 | 1.5 ± 0.4 | -0.2 ± 0.2 | PMN J2134-0153 | |
| 21 36 37 | 00 41 | 025 | 4.4 ± 0.06 | 3.5 ± 0.1 | 3.0 ± 0.1 | 1.4 ± 0.2 | 1.4 ± 0.3 | -0.7 ± 0.1 | GB6 J2136+0041 | |
| 21 39 18 | 14 25 | 041 | 2.2 ± 0.05 | 2.0 ± 0.08 | 1.9 ± 0.09 | 1.3 ± 0.2 | 1.0 ± 0.2 | -0.3 ± 0.2 | GB6 J2139+1423 | v |
| 21 43 26 | 17 41 | 044 | 1.2 ± 0.05 | 1.3 ± 0.07 | 1.0 ± 0.09 | 0.8 ± 0.2 | ... | -0.1 ± 0.3 | GB6 J2143+1743 | |
| 21 48 05 | 06 57 | 037 | 8.0 ± 0.06 | 7.7 ± 0.09 | 7.5 ± 0.1 | 6.5 ± 0.2 | 5.3 ± 0.5 | -0.2 ± 0.05 | GB6 J2148+0657 | v |
| 21 48 46 | -77 58 | 184 | 1.6 ± 0.04 | 1.4 ± 0.07 | 1.2 ± 0.07 | 0.7 ± 0.1 | ... | -0.5 ± 0.2 | PMN J2146-7755 | |
| 21 51 47 | -30 27 | | 1.3 ± 0.06 | 1.4 ± 0.1 | 1.4 ± 0.1 | 1.6 ± 0.2 | ... | 0.2 ± 0.2 | PMN J2151-3028 | v |
| 21 57 05 | -69 42 | 190 | 3.6 ± 0.05 | 2.9 ± 0.08 | 2.6 ± 0.08 | 2.1 ± 0.2 | 1.5 ± 0.4 | -0.6 ± 0.1 | PMN J2157-6941 | |
| 21 58 07 | -15 01 | 018 | 2.1 ± 0.07 | 1.8 ± 0.09 | 1.8 ± 0.1 | 1.4 ± 0.3 | 0.6 ± 0.3 | -0.4 ± 0.2 | PMN J2158-1501 | |
| 22 02 50 | 42 17 | 058 | 3.4 ± 0.05 | 3.5 ± 0.07 | 3.6 ± 0.07 | 3.3 ± 0.2 | ... | 0.0 ± 0.08 | GB6 J2202+4216 | V |
| 22 03 19 | 31 46 | 054 | 2.7 ± 0.05 | 2.4 ± 0.08 | 2.1 ± 0.1 | 1.7 ± 0.2 | 1.6 ± 0.4 | -0.4 ± 0.1 | GB6 J2203+3145 | V |
| 22 03 25 | 17 23 | 045 | 1.5 ± 0.06 | 1.6 ± 0.09 | 1.6 ± 0.1 | 1.5 ± 0.2 | ... | 0.1 ± 0.2 | GB6 J2203+1725 | |
| 22 06 13 | -18 38 | 016 | 1.8 ± 0.06 | 1.6 ± 0.09 | 1.2 ± 0.1 | 1.1 ± 0.2 | ... | -0.5 ± 0.2 | PMN J2206-1835 | |
| 22 07 12 | -53 48 | | 1.0 ± 0.05 | 0.8 ± 0.07 | 0.7 ± 0.1 | 0.4 ± 0.1 | ... | -0.6 ± 0.4 | PMN J2207-5346 | |
| 22 11 37 | 23 52 | 050 | 1.3 ± 0.06 | 1.5 ± 0.09 | 1.4 ± 0.08 | 1.0 ± 0.1 | 1.1 ± 0.3 | -0.1 ± 0.2 | GB6 J2212+2355 | v |
| 22 12 59 | -25 24 | | 0.9 ± 0.07 | 0.7 ± 0.1 | 0.6 ± 0.1 | 0.8 ± 0.1 | ... | -0.2 ± 0.4 | PMN J2213-2529 | a |
| 22 18 52 | -03 35 | 030 | 2.3 ± 0.06 | 2.0 ± 0.1 | 1.9 ± 0.1 | 1.6 ± 0.2 | ... | -0.4 ± 0.2 | PMN J2218-0335 | v |
| 22 25 38 | 21 19 | | 0.8 ± 0.06 | 1.0 ± 0.09 | 0.9 ± 0.09 | 0.6 ± 0.2 | 0.6 ± 0.2 | 0.1 ± 0.4 | GB6 J2225+2118 | |
| 22 25 46 | -04 55 | 029 | 5.2 ± 0.06 | 4.9 ± 0.1 | 4.3 ± 0.1 | 4.1 ± 0.2 | 3.6 ± 0.7 | -0.2 ± 0.08 | PMN J2225-0457 | V |
| 22 29 42 | -08 33 | 024 | 1.9 ± 0.07 | 2.3 ± 0.1 | 2.2 ± 0.1 | 2.9 ± 0.2 | 2.1 ± 0.5 | 0.3 ± 0.2 | PMN J2229-0832 | V |
| 22 29 47 | -20 50 | | 0.9 ± 0.06 | 0.8 ± 0.09 | 0.9 ± 0.1 | 1.0 ± 0.2 | 1.0 ± 0.3 | 0.1 ± 0.3 | PMN J2229-2049 | |
| 22 32 37 | 11 44 | 047 | 3.4 ± 0.06 | 4.0 ± 0.1 | 4.1 ± 0.1 | 4.5 ± 0.2 | 4.0 ± 0.3 | 0.2 ± 0.08 | GB6 J2232+1143 | V |
| 22 35 13 | -48 34 | 206 | 2.0 ± 0.05 | 2.2 ± 0.08 | 2.1 ± 0.1 | 2.0 ± 0.2 | 1.6 ± 0.4 | 0.1 ± 0.1 | PMN J2235-4835 | V |
| 22 36 23 | 28 24 | 057 | 1.1 ± 0.07 | 1.2 ± 0.08 | 1.2 ± 0.1 | 1.2 ± 0.1 | ... | 0.1 ± 0.3 | GB6 J2236+2828 | |
| 22 39 33 | -57 01 | 201 | 1.2 ± 0.04 | 1.4 ± 0.05 | 1.1 ± 0.07 | 0.9 ± 0.1 | 1.5 ± 0.7 | -0.0 ± 0.2 | PMN J2239-5701 | |
| 22 46 13 | -12 08 | 021 | 1.8 ± 0.06 | 1.8 ± 0.1 | 1.7 ± 0.2 | 1.2 ± 0.3 | ... | -0.2 ± 0.3 | PMN J2246-1206 | V |
| 22 54 00 | 16 08 | 055 | 7.4 ± 0.06 | 7.5 ± 0.1 | 7.5 ± 0.1 | 7.6 ± 0.2 | 7.2 ± 0.4 | 0.0 ± 0.04 | GB6 J2253+1608 | V |
| 22 55 44 | 42 01 | | 1.0 ± 0.04 | 0.7 ± 0.06 | 0.6 ± 0.08 | ... | ... | -0.8 ± 0.4 | GB6 J2255+4202 | |
| 22 56 29 | -20 14 | 019 | 0.8 ± 0.05 | 0.7 ± 0.08 | 0.8 ± 0.09 | 0.5 ± 0.2 | ... | -0.3 ± 0.4 | PMN J2256-2011 | |
| 22 58 06 | -27 57 | 012 | 5.2 ± 0.06 | 5.2 ± 0.09 | 5.0 ± 0.1 | 4.4 ± 0.2 | 3.6 ± 0.4 | -0.1 ± 0.07 | PMN J2258-2758 | V |
| 23 02 44 | -68 08 | | 0.6 ± 0.07 | 0.5 ± 0.08 | 0.5 ± 0.1 | ... | ... | -0.6 ± 0.8 | PMN J2303-6807 | a |
| 23 15 49 | -50 18 | 204 | 1.1 ± 0.04 | 1.1 ± 0.06 | 0.9 ± 0.1 | 0.9 ± 0.1 | ... | -0.3 ± 0.3 | PMN J2315-5018 | v |
| 23 22 33 | 44 48 | | 0.8 ± 0.03 | 0.9 ± 0.05 | 0.8 ± 0.07 | 0.6 ± 0.1 | 0.5 ± 0.3 | -0.1 ± 0.3 | GB6 J2322+4445 | a |

Table 1—Continued

| RA [hms] | Dec [dm] | ID | K [Jy] | Ka [Jy] | Q [Jy] | V [Jy] | W [Jy] | α | 5 GHz ID | Notes |
|----------|----------|-----|----------------|----------------|----------------|---------------|---------------|----------------|----------------|----------------|
| 23 22 48 | 51 05 | | 0.9 ± 0.05 | 0.8 ± 0.09 | 0.7 ± 0.08 | 0.5 ± 0.1 | ... | -0.4 ± 0.3 | GB6 J2322+5057 | ^a |
| 23 27 38 | 09 37 | | 0.8 ± 0.07 | 1.2 ± 0.1 | 1.1 ± 0.1 | 0.7 ± 0.2 | ... | 0.3 ± 0.4 | GB6 J2327+0940 | ^a |
| 23 29 04 | -47 33 | | 1.3 ± 0.04 | 1.0 ± 0.08 | 1.2 ± 0.1 | 0.8 ± 0.1 | 0.9 ± 0.2 | -0.3 ± 0.2 | PMN J2329-4730 | ^v |
| 23 30 22 | 33 48 | | 0.8 ± 0.06 | 0.8 ± 0.09 | 0.7 ± 0.09 | 0.8 ± 0.2 | ... | 0.0 ± 0.4 | GB6 J2330+3348 | ^a |
| 23 30 44 | 10 56 | | 1.0 ± 0.05 | 1.0 ± 0.08 | 0.9 ± 0.08 | 1.0 ± 0.2 | ... | -0.1 ± 0.3 | GB6 J2330+1100 | |
| 23 31 22 | -15 58 | 032 | 1.1 ± 0.07 | 0.9 ± 0.1 | 0.8 ± 0.2 | 0.8 ± 0.2 | 0.8 ± 0.4 | -0.4 ± 0.4 | PMN J2331-1556 | |
| 23 33 45 | -23 40 | | 0.9 ± 0.06 | 0.9 ± 0.08 | 1.0 ± 0.09 | 1.1 ± 0.3 | 0.7 ± 0.3 | 0.1 ± 0.3 | PMN J2333-2343 | ^a |
| 23 34 10 | 07 34 | | 1.1 ± 0.07 | 1.0 ± 0.08 | 1.0 ± 0.09 | 1.3 ± 0.2 | ... | -0.0 ± 0.3 | GB6 J2334+0736 | |
| 23 34 58 | -01 29 | | 0.6 ± 0.06 | 1.1 ± 0.1 | 1.0 ± 0.1 | 0.7 ± 0.2 | ... | 0.7 ± 0.5 | PMN J2335-0131 | |
| 23 35 27 | -52 43 | 195 | 1.2 ± 0.04 | 0.8 ± 0.05 | 0.7 ± 0.09 | 0.6 ± 0.1 | ... | -1.0 ± 0.3 | PMN J2336-5236 | ^{a,v} |
| 23 46 46 | 09 29 | | 1.2 ± 0.06 | 1.1 ± 0.07 | 0.8 ± 0.1 | 0.6 ± 0.2 | ... | -0.4 ± 0.4 | GB6 J2346+0930 | ^a |
| 23 48 14 | -49 31 | | 0.7 ± 0.06 | 0.7 ± 0.07 | 0.7 ± 0.07 | ... | ... | 0.1 ± 0.5 | ... | |
| 23 48 16 | -16 30 | 039 | 1.8 ± 0.06 | 1.8 ± 0.1 | 1.9 ± 0.1 | 1.5 ± 0.2 | 1.0 ± 0.3 | -0.1 ± 0.2 | PMN J2348-1631 | |
| 23 49 32 | 38 46 | | 0.8 ± 0.06 | 0.7 ± 0.1 | ... | ... | ... | -0.3 ± 1 | GB6 J2349+3849 | ^a |
| 23 54 22 | 45 50 | 074 | 1.6 ± 0.05 | 1.2 ± 0.07 | 1.2 ± 0.1 | 1.1 ± 0.2 | 0.9 ± 0.2 | -0.4 ± 0.2 | GB6 J2354+4553 | |
| 23 54 59 | 81 52 | | 0.8 ± 0.04 | 0.8 ± 0.1 | 0.7 ± 0.09 | 1.3 ± 0.2 | ... | 0.1 ± 0.3 | ... | |
| 23 56 11 | 49 53 | 075 | 0.9 ± 0.03 | 0.8 ± 0.05 | 0.6 ± 0.07 | 0.4 ± 0.1 | ... | -0.4 ± 0.3 | GB6 J2355+4950 | |
| 23 57 51 | -53 14 | 189 | 1.3 ± 0.04 | 1.1 ± 0.08 | 1.1 ± 0.1 | 1.1 ± 0.1 | 0.8 ± 0.3 | -0.2 ± 0.2 | PMN J2357-5311 | |
| 23 58 04 | -10 14 | | 1.1 ± 0.06 | 1.3 ± 0.07 | 1.2 ± 0.08 | 1.2 ± 0.2 | 0.9 ± 0.4 | 0.1 ± 0.3 | PMN J2358-1020 | |
| 23 58 53 | -60 50 | 187 | 1.9 ± 0.05 | 1.4 ± 0.07 | 1.2 ± 0.06 | 1.1 ± 0.1 | ... | -0.7 ± 0.2 | PMN J2358-6054 | |

^aIndicates the source has multiple possible identifications.

^bSource J0322-3711 (Fornax A) is extended, and the fluxes listed were obtained by aperture photometry.

^cSource J0519-0539 is a blend of the Lynds Bright Nebulae LBN 207.65-23.11 and LBN 207.29-22.66.

^dSource J1356+7647 is outside of the declination range of the GB6 and PMN catalogs. Identified as QSO NVSSJ135755+764320 by Trushkin (2006, private communication).

^eSource J1633+8226 is outside of the declination range of the GB6 and PMN catalogs. It was identified as NGC 6251 by Trushkin (2003).

^fSource J1657+4754 is identified as QSO GB6J1658+4737 by Trushkin (2006, private communication). Offset from the *WMAP* position is 18.1 arcminutes.

^vProbable variable: $\chi^2 > 37.6$.

^vVariable: $\chi^2 > 100$.

Table 2. WMAP Point Source Catalog –Five Years VW Bands

| RA hms | DEC dms | WMAP ID | Type | Dist. [arcmin] | f_V^a [Jy] | T_{V-W} [mK] | 5GHz ID | Identified /Masked ^b | Note ^c |
|-----------|------------|-----------------|------|-------------------|-----------------|-------------------|----------------|------------------------------------|-------------------|
| 00 06 19 | -06 27 31 | WMAP J0006-0623 | G | 4.1 | 1.7±0.3 | 0.35 | PMN J0006-0623 | Y / Y | ‡ |
| 00 18 49 | 73 24 34 | ... | QSO | 5.0 | 0.9±0.3 | 0.23 | GB6 J0019+7327 | Y / Y | ‡ |
| 01 08 43 | 01 39 53 | WMAP J0108+0135 | QSO | 5.0 | 1.8±0.3 | 0.36 | PMN J0108+0134 | Y / Y | ‡ |
| 01 36 55 | 47 50 27 | WMAP J0137+4753 | QSO | 1.2 | 3.1±0.3 | 0.56 | GB6 J0136+4751 | Y / Y | ‡ |
| 02 10 57 | -51 01 28 | WMAP J0210-5100 | QSO | 1.8 | 2.7±0.3 | 0.42 | PMN J0210-5101 | Y / Y | ‡, ◇ |
| 02 37 50 | 28 47 49 | WMAP 0237+2848 | QSO | 0.6 | 2.8±0.3 | 0.51 | GB6 J0237+2848 | Y / Y | ‡ |
| 03 19 48 | 41 30 13 | WMAP J0319+4131 | G | 0.5 | 5.6±0.3 | 1.01 | GB6 J0319+4130 | Y / Y | ‡, Per A |
| 03 21 52 | -37 08 24 | WMAP J0322-3711 | G | 10.6 | 2.1±0.3 | 0.48 | 1Jy 0320-37 | Y / Y | ‡, For A |
| 03 34 19 | -40 12 10 | WMAP J0334-4007 | QSO | 3.9 | 1.6±0.3 | 0.24 | PMN J0334-4008 | Y / Y | ‡, ◇ |
| 03 58 57 | 36 40 06 | ... | ... | ... | 5.0 | 0.79 | ... | N / Y | In NGC 1499 |
| 04 02 37 | 36 17 10 | ... | ... | ... | 6.2 | 0.99 | ... | N / Y | In NGC 1499 |
| 04 03 54 | -36 04 48 | WMAP J0403-3604 | QSO | 0.2 | 3.7±0.3 | 0.47 | PMN J0403-3605 | Y / Y | ‡, ◇ |
| 04 23 17 | -01 20 00 | WMAP J0423-0120 | QSO | 0.6 | 7.1±0.4 | 1.03 | PMN J0423-0120 | Y / Y | ‡ |
| 04 25 02 | -37 56 42 | WMAP J0424-3757 | QSO | 3.9 | 1.5±0.3 | 0.26 | PMN J0424-3756 | Y / Y | ‡, ◇ |
| 04 33 21 | 05 22 36 | WMAP J0433+0521 | G | 2.8 | 2.2±0.3 | 0.39 | GB6 J0433+0521 | Y / Y | ‡ |
| 04 40 28 | -43 34 55 | WMAP J0440-4332 | QSO | 2.6 | 1.9±0.3 | 0.33 | PMN J0440-4332 | Y / Y | ‡, ◇ |
| 04 49 14 | 11 22 22 | ... | G | 1.8 | 1.9±0.3 | 0.34 | GB6 J0449+1121 | Y / Y | *, ‡, ‡ |
| 04 52 54 | -69 18 56 | ... | HII | 5.9 | 1.6±0.3 | 0.20 | PMN J0452-6922 | Y / N | ‡, ‡, in LMC |
| 04 55 43 | -46 17 00 | WMAP 0455-4617 | QSO | 1.7 | 3.4±0.3 | 0.60 | PMN J0455-4616 | Y / Y | ‡, ◇ |
| 04 57 03 | -66 25 20 | ... | HII | 1.5 | 3.2±0.3 | 0.38 | PMN J0456-6624 | Y / Y | ‡, in LMC |
| 04 57 08 | -23 24 28 | WMAP J0456-2322 | QSO | 1.2 | 1.7±0.3 | 0.27 | PMN J0457-2324 | Y / Y | ‡, ◇ |
| 05 17 52 | -69 19 02 | ... | HII | 6.8 | 1.0±0.3 | 0.19 | PMN J0518-6914 | Y / N | ‡, ‡, in LMC |
| 05 19 47 | -45 48 21 | WMAP J0519-4546 | G | 1.7 | 3.5±0.3 | 0.63 | 1Jy 0518-45 | Y / Y | ‡, ◇, Pic A |
| 05 22 19 | -68 00 24 | ... | HII | 3.5 | 1.7±0.3 | 0.18 | PMN J0522-6757 | Y / N | ‡, ‡, in LMC |
| 05 23 09 | -36 26 48 | WMAP J0523-3627 | G | 2.3 | 3.4±0.3 | 0.44 | PMN J0522-3628 | Y / Y | ◇ |
| 05 34 57 | -67 33 47 | ... | HII | 3.0 | 1.8±0.3 | 0.21 | PMN J0535-6734 | Y / N | ‡, ‡, in LMC |
| 05 35 17 | -05 23 26 | ... | HII | 0.1 | 290.9±6.7 | 35.81 | ... | Y / Y | Ori A |
| 05 38 28 | -69 07 20 | ... | HII | 3.1 | 26.3±0.8 | 3.83 | PMN J0538-6905 | Y / Y | ‡, ‡, in LMC |
| 05 38 42 | -44 05 49 | WMAP J0538-4405 | QSO | 1.6 | 5.6±0.3 | 0.74 | PMN J0538-4405 | Y / Y | ‡, ◇ |
| 05 38 53 | -03 01 16 | ... | ... | ... | 1.9 | 0.31 | ... | N / N | in Ori |
| 05 40 10 | -03 08 51 | ... | ... | ... | 2.0 | 0.32 | ... | N / N | in Ori |
| 05 40 30 | -02 39 03 | ... | ... | ... | 2.6 | 0.41 | ... | N / N | in Ori |
| 05 41 43 | -01 53 49 | ... | HII | 0.2 | 45.8±1.2 | 5.78 | PMN J0541-0154 | Y / Y | ‡, Ori B |
| 06 07 58 | -06 26 25 | ... | HII | 4.5 | 7.0±0.4 | 0.37 | PMN J0607-0623 | Y / Y | ‡, *, ‡ |
| 06 09 38 | -15 41 35 | WMAP J0609-1541 | QSO | 1.3 | 2.2±0.3 | 0.37 | PMN J0609-1542 | Y / Y | ‡, ◇ |
| 06 35 36 | -75 15 15 | WMAP J0635-7517 | QSO | 1.2 | 2.5±0.3 | 0.42 | PMN J0635-7516 | Y / Y | ‡, ◇ |
| 07 21 54 | -37 30 36 | ... | ... | ... | 1.6 | 0.25 | ... | N / N | in Gum |
| 07 22 40 | 71 20 53 | WMAP J0721+7122 | QSO | 3.7 | 1.9±0.3 | 0.25 | GB6 J0721+7120 | Y / Y | ‡ |
| 07 31 22 | -48 09 24 | ... | ... | ... | 1.7 | 0.26 | ... | N / N | in Gum |
| 07 34 58 | -48 49 11 | ... | ... | ... | 2.1 | 0.33 | ... | N / N | in Gum |
| 07 36 27 | -49 50 52 | ... | ... | ... | 1.5 | 0.24 | ... | N / N | in Gum |
| 07 44 33 | -50 33 49 | ... | ... | ... | 1.6 | 0.25 | ... | N / N | in Gum |
| 07 49 03 | -50 39 05 | ... | ... | ... | 1.6 | 0.26 | ... | N / N | in Gum |
| 08 02 32 | -50 41 25 | ... | ... | ... | 1.6 | 0.26 | ... | N / N | in Gum |
| 08 14 06 | -52 52 02 | ... | ... | ... | 1.6 | 0.25 | ... | N / N | in Gum |

Table 2—Continued

| RA hms | DEC dms | WMAP ID | Type | Dist. [arcmin] | f_V^a [Jy] | T_{V-W} [mK] | 5GHz ID | Identified /Masked ^b | Note ^c |
|-----------|------------|-----------------|------|-------------------|-----------------|-------------------|-----------------------------|------------------------------------|-------------------|
| 08 36 38 | -20 15 52 | WMAP J0836-2015 | QSO | 1.2 | 1.9±0.3 | 0.39 | PMN J0836-2017 | Y / Y | ‡, ◇ |
| 08 41 21 | 70 55 29 | WMAP J0841+7053 | QSO | 1.8 | 1.7±0.3 | 0.31 | GB6 J0841+7053 | Y / Y | ‡ |
| 08 54 58 | 20 06 06 | WMAP J0854+2006 | QSO | 2.2 | 4.2±0.3 | 0.61 | GB6 J0854+2006 | Y / Y | ‡ |
| 09 09 12 | 01 23 37 | WMAP J0909+0119 | QSO | 2.1 | 1.6±0.3 | 0.44 | GB6 J0909+0121 | Y / Y | ‡ |
| 09 21 28 | 07 24 22 | ... | ... | ... | 2.3 | 0.36 | ... | N / N | ... |
| 09 27 05 | 39 03 46 | WMAP J0927+3901 | QSO | 1.5 | 4.6±0.3 | 0.72 | GB6 J0927+3902 | Y / Y | ‡ |
| 10 58 31 | 01 33 44 | WMAP J1058+0134 | QSO | 0.4 | 4.2±0.3 | 0.80 | GB6 J1058+0133 | Y / Y | ‡ |
| 10 59 09 | -80 04 12 | WMAP J1059-8003 | QSO | 1.1 | 2.3±0.3 | 0.30 | PMN J1058-8003 | Y / Y | ‡, ◇ |
| 11 53 04 | 49 29 55 | WMAP J1153+4932 | G | 3.5 | 2.1±0.3 | 0.30 | GB6 J1153+4931 | Y / Y | ... |
| 11 59 41 | 29 19 49 | WMAP J1159+2915 | QSO | 5.5 | 1.8±0.3 | 0.33 | GB6 J1159+2914 | Y / Y | ‡ |
| 12 29 08 | 02 03 06 | WMAP J1229+0203 | QSO | 0.3 | 14.6±0.5 | 2.32 | PMN J1229+0203 | Y / Y | ‡ |
| 12 30 49 | 12 22 56 | WMAP J1230+1223 | G | 0.5 | 9.6±0.4 | 1.49 | GB6 J1230+1223 | Y / Y | Vir A |
| 12 47 02 | -25 46 32 | WMAP J1246-2547 | QSO | 3.7 | 1.7±0.3 | 0.33 | PMN J1246-2547 | Y / Y | ‡, ◇ |
| 12 56 12 | -05 47 28 | WMAP J1256-0547 | QSO | 0.2 | 16.9±0.6 | 2.45 | PMN J1256-0547 | Y / Y | ‡ |
| 13 10 47 | 32 24 25 | WMAP J1310+3222 | QSO | 5.3 | 1.7±0.3 | 0.28 | GB6 J1310+3220 | Y / Y | ‡ |
| 13 15 59 | -33 45 18 | WMAP J1316-3337 | QSO | 6.6 | 1.9±0.3 | 0.33 | PMN J1316-3339 | Y / Y | ‡, ◇ |
| 13 22 35 | -44 38 25 | ... | ... | ... | 2.2 | 0.34 | ... | N / Y | In Cen A vicinity |
| 13 25 33 | -42 59 25 | ... | G | 2.0 | 25.6±0.8 | 4.02 | PMN J1325-4257 ^d | Y / Y | ‡, *, ◇, Cen A |
| 13 37 41 | -12 56 37 | WMAP J1337-1257 | QSO | 0.8 | 6.0±0.3 | 0.86 | PMN J1337-1257 | Y / Y | ‡ |
| 14 27 53 | -42 06 36 | WMAP J1427-4206 | QSO | 0.7 | 2.7±0.3 | 0.39 | PMN J1427-4206 | Y / Y | ‡, ◇ |
| 15 18 04 | -24 21 26 | WMAP J1517-2421 | G | 5.1 | 1.8±0.3 | 0.34 | PMN J1517-2422 | Y / Y | ‡, ◇ |
| 15 49 33 | 02 33 46 | WMAP J1549+0236 | QSO | 3.4 | 2.1±0.3 | 0.36 | GB6 J1549+0237 | Y / Y | ‡ |
| 16 13 42 | 34 12 03 | WMAP J1613+3412 | QSO | 0.8 | 2.9±0.3 | 0.51 | GB6 J1613+3412 | Y / Y | ‡ |
| 16 18 32 | -77 12 31 | WMAP J1618-7716 | QSO | 5.3 | 1.7±0.3 | 0.25 | PMN J1617-7717 | Y / Y | ‡, ◇ |
| 16 20 18 | -25 34 47 | ... | ... | ... | 2.7 | 0.43 | ... | N / N | in Oph |
| 16 20 51 | -25 21 11 | ... | ... | ... | 3.0 | 0.47 | ... | N / N | in Oph |
| 16 28 38 | -09 03 59 | ... | ... | ... | 2.1 | 0.34 | ... | N / N | in Oph |
| 16 35 05 | 38 08 11 | WMAP J1635+3807 | QSO | 2.1 | 4.1±0.3 | 0.56 | GB6 J1635+3808 | Y / Y | ‡ |
| 16 38 26 | 57 18 39 | WMAP J1638+5722 | QSO | 2.4 | 1.6±0.3 | 0.26 | GB6 J1638+5720 | Y / Y | ‡ |
| 16 42 26 | 68 55 54 | WMAP J1642+6854 | QSO | 1.8 | 1.3±0.3 | 0.31 | GB6 J1642+6856 | Y / Y | ‡ |
| 16 42 56 | 39 48 44 | WMAP J1642+3948 | QSO | 0.6 | 5.1±0.3 | 0.78 | GB6 J1642+3948 | Y / Y | ‡ |
| 17 20 32 | -00 59 59 | ... | G | 1.5 | 2.6±0.3 | 0.43 | PMN J1720-0058 | Y / Y | ‡, * |
| 17 33 01 | -13 06 25 | ... | QSO | 1.6 | 3.3±0.3 | 0.51 | PMN J1733-1304 | Y / Y | *, ‡ |
| 17 43 56 | -03 48 42 | ... | QSO | 1.6 | 4.5±0.3 | 0.76 | PMN J1743-0350 | Y / Y | *, ‡ |
| 17 51 38 | 09 40 23 | ... | QSO | 1.9 | 3.6±0.3 | 0.57 | GB6 J1751+0938 | Y / Y | ‡, *, ‡ |
| 17 53 44 | 28 47 37 | WMAP J1753+2848 | QSO | 0.6 | 2.0±0.3 | 0.27 | GB6 J1753+2847 | Y / Y | ‡ |
| 18 06 49 | 69 50 36 | WMAP J1806+6949 | G | 1.1 | 1.3±0.3 | 0.23 | GB6 J1806+6949 | Y / Y | ‡ |
| 18 29 37 | 48 46 45 | WMAP J1829+4845 | QSO | 2.2 | 2.3±0.3 | 0.28 | GB6 J1829+4844 | Y / Y | ... |
| 19 24 52 | -29 14 15 | ... | QSO | 0.3 | 10.1±0.4 | 1.60 | PMN J1924-2914 | Y / Y | ‡, *, ‡, ◇ |
| 19 27 42 | 73 56 34 | WMAP J1927+7357 | QSO | 1.5 | 3.0±0.3 | 0.45 | GB6 J1927+7357 | Y / Y | ‡ |
| 19 57 55 | -38 45 03 | WMAP J1958-3845 | QSO | 0.9 | 2.9±0.3 | 0.35 | PMN J1957-3845 | Y / Y | ‡, ◇ |
| 20 11 12 | -15 47 51 | WMAP J2011-1547 | QSO | 1.5 | 1.1±0.3 | 0.32 | PMN J2011-1546 | Y / Y | ‡, ◇ |
| 20 56 01 | -47 15 56 | WMAP J2056-4716 | QSO | 2.8 | 2.6±0.3 | 0.39 | PMN J2056-4714 | Y / Y | ‡, ◇ |
| 21 34 15 | -01 59 35 | WMAP J2134-0154 | QSO | 6.4 | 1.3±0.3 | 0.38 | PMN J2134-0153 | Y / Y | ‡ |
| 21 48 07 | 06 56 29 | WMAP J2148+0657 | QSO | 1.2 | 6.5±0.3 | 1.02 | GB6 J2148+0657 | Y / Y | ‡ |

Table 2—Continued

| RA hms | DEC dms | WMAP ID | Type | Dist. [arcmin] | f_V^a [Jy] | T_{V-W} [mK] | 5GHz ID | Identified /Masked ^b | Note ^c |
|-----------|------------|-----------------|------|-------------------|-----------------|-------------------|----------------|------------------------------------|-------------------|
| 21 57 19 | -69 41 42 | WMAP J2157-6942 | G | 1.2 | 2.1 ± 0.3 | 0.41 | PMN J2157-6941 | Y / Y | ◇ |
| 22 02 47 | 42 17 37 | WMAP J2202+4217 | QSO | 1.2 | 3.6 ± 0.3 | 0.39 | GB6 J2202+4216 | Y / Y | ... |
| 22 18 55 | -03 30 48 | WMAP J2218-0335 | QSO | 4.9 | 1.5 ± 0.3 | 0.35 | PMN J2218-0335 | Y / Y | ‡ |
| 22 25 42 | -04 57 56 | WMAP J2225-0455 | QSO | 1.6 | 3.6 ± 0.3 | 0.68 | PMN J2225-0457 | Y / Y | ‡ |
| 22 29 46 | -08 31 23 | WMAP J2229-0833 | QSO | 2.1 | 2.8 ± 0.3 | 0.41 | PMN J2229-0832 | Y / Y | ‡ |
| 22 32 35 | 11 42 50 | WMAP J2232+1144 | QSO | 1.1 | 4.2 ± 0.3 | 0.53 | GB6 J2232+1143 | Y / Y | ... |
| 22 35 21 | -48 35 13 | WMAP J2235-4834 | QSO | 1.5 | 2.1 ± 0.3 | 0.36 | PMN J2235-4835 | Y / Y | ‡, ◇ |
| 22 53 57 | 16 10 11 | WMAP J2254+1608 | QSO | 1.3 | 8.0 ± 0.4 | 1.06 | GB6 J2253+1608 | Y / Y | ‡ |
| 22 58 10 | -27 59 31 | WMAP J2258-2757 | QSO | 1.5 | 4.7 ± 0.3 | 0.75 | PMN J2258-2758 | Y / Y | ‡, ◇ |

^aThe V-band fluxes of the identified sources are calculated as in Chen & Wright (2008); The fluxes of the unidentified sources are estimated by multiplying the V-W temperature in the filtered map with the median conversion factor from V-W temperatures to V-band fluxes of the identified sources and are given without an uncertainty.

^bThree-year WMAP point source mask is considered here.

^c† and * indicate the new sources cross-detected in Nie & Zhang (2007) and López-Caniego et al. (2007). ‡ and ◇ indicate the source is included in the CRATES catalog (Healey et al. 2007) and the AT20G BSS catalog (Massardi et al. 2008), respectively.

^dIndicates the source has multiple possible 5 GHz identifications. The brightest one is given here.

Table 3. Significant Polarization Percentages

| WMAP ID | K | Ka | Q |
|------------|---------------|---------------|---------------|
| J0322–3711 | 8.5 ± 0.4 | 9.3 ± 1.2 | 8.1 ± 2.2 |
| J0519–4546 | 5.7 ± 0.9 | 8.6 ± 2.0 | ... |
| J1229+0203 | 4.9 ± 0.3 | 4.4 ± 0.6 | 4.8 ± 0.8 |
| J1230+1223 | 3.8 ± 0.4 | 4.8 ± 0.7 | 4.4 ± 1.0 |
| J1256–0547 | 3.6 ± 0.4 | 3.1 ± 0.7 | 3.8 ± 0.8 |